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## On the classification of business strategy

O'Keefe, Michael

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# **ON THE CLASSIFICATION OF BUSINESS STRATEGY**

Michael John O'Keefe

A thesis submitted in partial fulfilment of the requirements for the degree of Ph.D.

King's College London

## Acknowledgements.

I would like to thank Stephen Pratten and Finola Kerrigan for their supervision and advice, and Jennifer O'Keefe for indulging me in this enterprise.

## **Abstract.**

An enquiry into the origins, content and subsequent treatment of certain major business strategy classification schemes by Miles and Snow, Michael Porter and Henry Mintzberg found little supporting theory within existing organisational and management science literature for a principled critique thereof. Furthermore, there is little discussion within such literature that addresses the ontic and epistemic status of cross-cutting abstract institutional kinds that might apply to the categorisation of generalised strategic behaviours. Accordingly, this thesis develops an eclectic synthesis of theoretical contributions from philosophy, (Richard Boyd, John Dupré, Ian Hacking, Ruth Millikan, Amie Thomasson, *inter alia*), semiotics (*e.g.* Umberto Eco, George Lakoff ) and cognitive science (especially, Susan Gelman and Douglas Medin) to produce a new, bespoke theoretical framework for the subsequent case studies of these business strategy classification schemes. It recognises the artifactual nature of such schemes and endorses a pragmatic and pluralistic approach that proposes a typology of classification schemes and acknowledges the possibility of intransigent homologating forces being responsible for at least some of the postulated similarities. It steers between essentialism and nominalism, in ‘accommodationist’ mode. The framework recognises that some such schemes are more ‘successful’ than others and attributes this to a number of their ontic and epistemic features in the three detailed case studies. The use (and abuse) of these schemes in our epistemic practices is critiqued. Some consequential recommendations are made concerning the promulgation and subsequent use in research and pedagogy of business strategy classification schemes. Recommendations that may hold wider relevance for social sciences in general.

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## Chapter ONE

### ON THE CLASSIFICATION OF BUSINESS STRATEGY.

*'In science it is usual to make phenomena that allow of exact measurement into defining criteria for an expression: and then one is inclined to think that now the proper meaning has been **found**. Innumerable confusions have arisen this way'.  
( L. Wittgenstein. 1967. *Zettel*. para 438.[cited in Phillips, 1977]).*

#### 1 GENERAL INTRODUCTION.

##### 1.1 The evolution of this study.

Like many research projects, the end product is little like that envisaged at the outset. This started as an enquiry into the origins and nature of the various heuristics we introduce to business students for the purposes of strategic analysis, particularly case study analysis. The research question being where do these 'didactic representations for strategic analysis' originate ? and why do some become widely adopted into the academic canon, whilst others prove of little consequence ? The initial literature and thinking engaged mostly with questions of pedagogy, the 'faddishness' of many business techniques and the way that a disciplinary community establishes its 'canon'. However, this had to start with a particular example, and the random event of hearing a colleague describe his problems with applying the 'Miles and Snow typology' to his research study of Chinese township and village enterprises suggested this as the starting point. Despite thirty years of public and private sector employment in what might be loosely described as 'strategy', I had not come across the typology in practice. It had, however, figured early in the teaching of strategy and had proved itself of value in relation to some case study work with students. However, I recognised to my chagrin, that, despite having taught the typology, I had only the flimsiest notion of where it had originated and how it had come to figure in the most prominent strategy textbook of the

day, *Exploring Corporate Strategy* (Johnson, Scholes & Whittington, 1984-2011 ~ 9 editions).

Accordingly, the initial phase was that of taking the Miles and Snow typology as a case study; tracing its origins in early working papers, culminating in the major promulgation via their book ~ *Organisational strategy, structure and process* (1978), as described in the first case study here. However, the investigation included also the way in which the typology was taken up in strategy research, particularly in the USA, but also worldwide, including economies structurally very different to the Anglo-Saxon model of capitalism. This raised many questions as to the exact nature of the conceptualisation of the types by those seeking to deploy the typology in their investigations. Why was it that this research largely ignored the putative causal mechanism underpinning the types as postulated by Miles and Snow ? What justified the extension of those types to entirely different contexts ? (One would not, for example, apply a classification of alpine flora to rain forest species). Could the typology sensibly be instrumented in the manner subsequently adopted in strategy research ? Why did such research privilege a sharp-edged quantitative approach to performance of organisations as if naturally **found** to belong to one or other of the various categories ? Do the classes we determine in the social realm apply in the same way that they might in the physical sciences ? This prompted what, at the time, was a subsidiary interest, ~ what does categorisation in the highly abstract, institutional field of business strategy entail ? In order to understand, and, in particular, to critique the manner in which Miles and Snow's work was being employed in academe it was necessary to delve more deeply into the processes involved in categorisation itself.

## 1.2 The 'gap' and the 'contribution'.

So, this subsidiary interest soon became the main focus of this research as it narrowed and shifted to the current track; far more focussed upon the origination, nature and uses of business strategy classification schemes. However, the organisation and management science literature on this subject, as found mainly in the field of business research methodology, lacks theoretical engagement with the metaphysics of the entities being categorised or their psychological and sociological roots. It is not unusual to find that the literature dealing with information sciences starts with some examination of the

(classical) philosophical roots to categorisation. That literature, however, tends fairly quickly to enter into technical matters regarding data handling, retrieval, etc. (e.g. Lambe, 2007). There are some ‘near misses’ within the qualitative research texts; for example ‘grounded theory’ (Glaser & Strauss, 1967; Locke, 2001) is deeply concerned with the analysis of coded data as an epistemological issue, but provides little enlightenment as to why and how the concepts and categories to be coded were brought into existence. The ontology of the categories themselves is just not explicitly problematised in this literature. In a somewhat different vein, Bowker and Starr’s *Sorting things out: classification and its consequences* (2007), does introduce the nature of social classification from a philosophical standpoint. Here, however, it is the ‘downstream’ social consequences of sorting into categories that they were concerned with, rather than how the categories had originated in the first place. They are strong on the examination of the sociological consequences of sorting society’s members, but relatively silent on the segmentation (sorting) process itself.

Similarly, there is an extensive and growing contemporary literature in the sociology of organisations that engages with empirical studies of the emergence and pliability of product, informal and institutional categories in fields as diverse as political parties, professional and financial services, cars, film genres and cuisines, etc., e.g. Hsu et al 2010. Despite proximity of interest in categorisations, the engagement here is sociological, not metaphysical. An indication of the ‘gap’ between this literature and the approach here is perhaps indicated by the fact that the introductory chapter to Hsu et al 2010, is titled ‘*Research on categories in the sociology of organisations*’ (Negro et al) and sets out a review of published work in this area. It contains 111 references. Only five of these are common to the references given here – Berger & Luckman, 1966; DiMaggio & Powell, 1983; Hannan & Freeman, 1977 & 1986; and Weick, 1979. This is not to argue that the two fields of research are incompatible or antithetical, simply that at present, despite their complementarity, they are relatively independent of one another. A position that, in all probability, could change for the better understanding and progress of both.

However, ‘emancipatory’ literature, especially that dealing with gender and race, does probe the biological, natural sciences, as well as the social aspects of categorisation. As this literature demonstrated, if one wanted to probe and critique the

ontology of business strategy classification schemes, as adopted by the field, it was necessary to go deeper. Accordingly, the literature search was widened to domains outside organisational and management sciences to include an eclectic mix of contributions from the philosophy of natural (and social) kinds, epistemology, linguistics and cognition. The resulting thesis makes no claim to originality in these disparate fields, but does, however, claim to be a substantive, original contribution to the field of the study of business strategy by bringing to bear a fresh and thorough review of some major case studies of attempts at its classification, grounded in the relevant perceptions afforded by certain of these extra-field theoreticians. Further, it is claimed that the findings reported here are of material relevance to the general field of management and organisational science, and of potential application in the social sciences more generally construed.

## 2 THE FITNESS OF CATEGORISATION.

The fundamental importance of the human capacity to categorise from instances to generalities has been widely reported (Braisby, 2005; Goswami, 2008; Harré, 2002(a); Millikan, 2000; Smith & Medin, 1981). If this berry tastes good and that one made us sick, it is a fitness characteristic that we can recognise each subsequent encounter as being of the same respective kinds. There are innumerable ways in which we can segment the world. It is vital that we can distinguish between animals that we can eat and those that would, given the chance, eat us. We can also distinguish between animals with fur and those without, those that we can pat and those we can't, those that fly from those that swim, etc. What matters is how useful those segmentations are to human survival and pursuits. The instinct to categorise is central to humanity. And the ability to identify, label and communicate sameness is core to the language capacity that enables human progress. The world and the word are interwoven in all our understandings (Goodman, 1978; Thouless, 1953; Tsoukas, 1998). Every indefinite noun is a category of being, every verb a category of action, every adverb a distinguishing property. Categorisation and language are inseparable and contribute to the development of enduring, intersubjective bodies of knowledge. But the concern here is not with the unconscious and unreflective capacity for recognising and naming acquired with language in childhood, but the effortful classifications and nomenclatures created in pursuit of knowledge. This thesis is about the ways in which we create and disseminate

concepts relating to an abstruse topic; that of business strategy. It is directed to strategists and organisational scientists, but may be of interest to all who create and consume knowledge in the social sciences. It argues that we seldom pause to think about where our conceptualisations of our subject matter have come from, nor whether they are truly intersubjectively understood. Yet a key step in being more 'scientific' about our subject matter is the recognition of the contingent origination and contextual constraints of the conceptual terms and categories, the 'kinds', we deploy.

### 3 THE CENTRALITY OF KINDS TO (ANY) SCIENCE.

Gerring (1999) cites Max Weber as suggesting that progress in the social sciences occurs largely through conflict about terms and their definitions, and their eventual resolution. Intellectual expertise, of any sort, consists of knowing whereof one speaks in a community of practice (Collins & Evans, 2007; Wenger, 1998). Higher level thought and theorising engages concepts, schema and scripts that manipulate generalities rather than singularities, representative abstractions rather than concrete individuals, postulates rather than results. Central to this uplift from the particular to the universal is our ability to classify and refer to, or name, phenomena and to recognise their associated structures and relations. It is difficult – impossible even ? – to envisage being able to express anything meaningful about the world without relying in some manner upon an intersubjectively accepted lexicon of the terms employed to describe that world. Such terms direct our attention and define what we perceive (Weick, 1995). The very possibility of a science depends upon knowing the kinds of things within its domain. Being a 'scientist' in any domain entails grasp of the special terminology and concepts particular to that field; its 'kinds'. Putnam, (1975), refers to the 'linguistic division of labour' within all specialisms. Fodor (1974) situates his critique of reductivism in an explicit assumption that the different disciplines of the 'special sciences' such as psychology and economics differentiate themselves by virtue of holding their own distinctive natural kinds. And each field of knowledge will develop its own 'styles of reasoning' (Hacking, 2002(a)) or 'disciplinary matrix' (Boyd, 1991; McDonough, 2003) in which the kinds particular to that field are central. Bhaskar's (1979) radical conceptualisation of the possibility of naturalism in the social sciences is to take the categories of phenomena deployed in the methods of that science and ask what reality must be like for those methods to have purchase. Whilst Boyd's

accommodation thesis (1991; 1999(a&b); 2010) posits that the key criterion for the utility or truth of any of the transitive kinds recognised in a science is their conformity to the intransitive causal structures operative in that domain. (See Chapter 2).

Furthermore, the principle is amply supported in practice. There are many well known examples where the development of a structured relational classification scheme has been fundamental to accelerating progress within a science, even to the recognition of that area of enquiry as a separate and legitimate field worthy of serious study. Thus, whether it is Linnaeus' classification in the biological sciences, or Mendeleyev and the Periodic Table for chemistry, such structured codification was important to the establishment of the discipline concerned (and this even prior to the subsequent discovery of underlying causalities in genetics or sub-atomic structures). As McOuat (2009) points out; the contribution is not just an intersubjective lexicon, but the associated facilitation of knowledge exchange and accumulation. This contribution of the categorising of phenomena continued with the spread and recognition of sub-fields such as geology, palaeontology and meteorology. (Hamblyn, 2001). As Aunger & Curtis (2008, p317) remark; '*Sciences able to identify appropriate analytical units for their domain, their natural kinds, have tended to be more progressive.*' Proposed classification schemes in the natural sciences can often be empirically tested, using hypothetico-deductive methods and, where attempts at falsification fail, scientific laws, or at least regularities, can be established with some confidence. This is facilitated by the fact that simple ostension to physical entities (copper, *Rosa multiflora*) or artefacts (toaster, Ford Mondeo), is possible to a degree unmatched in other domains of knowledge.

When we look at classification in the social sciences, the position is somewhat more complex. Our special interest is in the domain of organisation and management studies and, in the even more specialist branch of business strategy. The object of our case studies is the attempted categorisation of business strategy as generalisations about rather abstract aspects of a firm's intentions and behaviour. Now, 'strategy' (for the purposes of this thesis) is the collective sense of what needs to be done on the part of those charged with responsibility of steering a particular commercial organisation towards its superordinate goals. This puts the work squarely in the domain of a specific socially constructed world, but one which, nonetheless contains real causal forces

operating at both specific and general levels. The setting of strategic objectives will be constrained by external social forces (markets, laws, economic and political conditions, technological potentials, etc.), but will also be subject to the individual and collective perceptions, motivations and prejudices of the top management team. Thus, in addition to societal mechanisms, we are also interested in the cognition, agency and social interplay of the protagonists; an internal dynamic of the players. More of this, and the challenges it brings, in Chapter 2; but for now we need to register that an understanding of our ‘kinds’ is absolutely central to making sense and progress in our field. Inattention to this point may be a contributing factor to the disappointment at progress in organisational and management science often voiced in its academic literature (Rynes et al, 2001; Starkey & Madan, 2001).

But these ‘kinds’, as discussed above, are referring expressions (Ben-Yami, 2001), given shared meanings within a language community. They are not all of the same ontic nature. In particular, just as there are differences between the types of phenomena which fall within the domain of a particular field, so there are differences between kinds of kinds to be found as objects of study. Note that one will encounter also different epistemic types of classification schemes devised by the language community that is the organisational and management sciences field. These types of classification schemes are discussed and developed in Chapter 3. But in this chapter, the concern, for now, is to simply delineate the different ontological kinds that are the focus of that epistemology.

#### 4 SOME PRELIMINARIES ABOUT KINDS.

The nature of kinds and kindhood in general is itself a contested arena. In particular, there are three ‘fault lines’ that appear to divide authorities in their conceptualisations. These issues are discussed in greater depth in Chapter 2, however, the nature of these core differences in approach are briefly outlined here. The first is the rival construal of kinds within two main schools of thought – essentialism and nominalism (albeit they are different positions within each). Under a broadly essentialist construal, a kind is given by a determinable set of necessary and sufficient property conditions that are independent of any uses of the categories so determined. Kinds are, or would be, unambiguously recognisable in the world, whether or not there is anyone



to recognise them. Kinds group similar things together. The similarity recognised in a kind term is considered the intransitive product of causation, whether the causal factors are forces of nature or social structures and mechanisms. Kinds reflect the world as it is since they are caused by the world.

On the other hand, some writers point out that innumerable similarities can be found between the things we encounter in the world and that it is inescapably a matter of human choice that determines which properties are singled out as significant and used as sortals. Similarity is really found in the eye of the beholder. Thus, under a broadly nominalist construal, kinds are simply groupings of entities or phenomena that meet the current cognitive and processing requirements of human projects. Without human determination, kinds do not exist as such. So, for an essentialist, kinds are given by the natural or social world; for a nominalist they are entirely human creations ~ our way of handling these worlds. There are, of course, intermediate positions; particularly that taken by Umberto Eco (2000): that the world is not segmented into kinds *per se*, but has 'grain' that our kinds do well to respect. A similar intermediate position, ~ Richard Boyd's 'accommodation thesis', ~ is outlined in Chapter 2.

The second main 'fault line' is with regards to the nature of 'sortals' ~ the boundaries that determine the qualification of some entity or phenomena for kindhood. The full extent of the qualifying entities is termed the 'extension' of a kind. Do all proper kinds have to have firm boundaries or are 'fuzzy' boundaries acceptable? Some expect, or impose by definition, that whether or not something belongs to a kind is clear cut. In large measure, such a construal accords with an essentialist viewpoint that kindhood is determined by possession of the necessary and sufficient properties. Something either qualifies as a member of the kind or it is disqualified, there are no intermediate grades. However, as indicated above, kinds are particular concepts embodied in language and its uses. Research by linguists such as Eleanor Rosch and others (Lakoff, 1987; Taylor, 2003) has shown that membership of kinds (whether in the natural world, such as 'bird', or the social world, such as 'furniture') is graduated, with some more central or typical than others. Thus, sortals are sometimes vague and / or relate to similarity comparisons to prototypes or exemplars. Some members of a kind are better or more representative, more 'generic', than others in our everyday usage of categories.

Finally, there are different positions as regards the range of phenomena over which these questions of essences and sortals are relevant. For some, only certain instantiations of inanimate physical entities, as might be encountered in the fields of physics or chemistry, would qualify for consideration as ‘proper’ kinds. Whilst others are prepared to extend the conceptualisation of kindhood to a much broader field of application, including artefacts and social phenomena.

Of interest here is the fact that, as the case studies of business strategy classification schemes reveal, there is a tendency for different construals, based upon different ontological commitments of the protagonists, to compound difficulties in the acceptance and use of our classifications for knowledge creation and decision-making. Wittgenstein’s ‘innumerable confusions’ seems particularly rife in our field.

## 5 KINDS OF KINDS.

So far, the outline given above treats the notion of ‘kinds’ as a single category interpreted differently across contested fault lines. However, discussion of ‘kindhood’ is replete with alternative qualifiers before the word ‘kind’, revealing the different ontological orientations and commitments of the writers concerned (that third fault line). In a sense then, the various contributions on the philosophy, semantics or cognition of kinds differ in their approach due, at least in part, to different construals of the central notion of the kind of kind that is being typically addressed. There may be irreconcilable differences in how belief in kinds is argued, but there may also be problems arising from the fact that they are approaching the question from different angles. At core they are not discussing the same thing. Accordingly, a nominal classification of the main types of kindhood that figure in the various debates is presented below. This leads to an indication of the atypical and problematic ontological, epistemological and semantic status of the business strategy kinds to which this whole work is oriented. This discussion is the author’s, but owes acknowledgement to the treatment provided by Thomasson (2003) and Ben-Yami (2001). It argues for accepting a plurality of kinds as a means of unravelling the complexities inherent in a discussion of kindhood.

### 5.1 Natural Kinds.

These are defined for our purposes as the prototypical, pure kinds to which the analytic philosophers usually refer. They are strongly homogeneous kinds that result from the forces of nature and which are unmoved by human endeavours or cognitions. Natural kinds would exist without human existence or human minds to comprehend them. One such natural force or motivation is (usually) prime and provides the defining necessary and sufficient condition of membership. Ideally, they are entirely uniform and stable and the causal motivation of such kinds is both supervenient (nested hierarchically) and invariant over eons of time. A compound can be a natural kind, in that the proportions of components are fixed by nature, but a mixture is not one. Perversely, satisfactory examples of such substances encountered naturally are rare, if not entirely absent – ostension to naturally found mineral substances such as gold or salt are seldom to pure samples, and even purified water as condensed steam is not pure H<sub>2</sub>O, given the existence of isotopes. Subatomic particles, elements, photons and the like are cited as examples, but our knowledge thereof is owed entirely to the artifice of humans in their detection and grasp. Thus one may, for the purpose of discussion of kinds and kindhood, refer simultaneously to ‘natural kinds’ as if they exist in nature, yet in the knowledge that all examples of such to which we refer are idealisations. The semantic reference can be by ostension to phenomena which are artefacts of human refinement and discernment, possibly via scientific instrumentation devised by us for that purpose. Definitions are based upon such refined and idealised products. So, counterintuitively, one may conclude that exemplars of natural kinds are frequently, if not always, epistemically ‘unnatural’; since practical knowledge thereof is a consequence solely of human intents and purposes.

Those that hold to an essentialist view of kindhood generally have the idealised natural kinds described above in mind as the central concept around which their ideas coalesce. Albeit that essentialists may extend their criteria to include some or most historical kinds (see below), and even into the social realm with major *ceteris paribus* qualifications, the defence of essentialist views seems nearly always to rest upon examples of natural kinds drawn from the physical sciences, especially physics and chemistry. A positivist about natural kinds will hold that there is some essential determinant of kindhood and that, if not currently known, it is the mission of science to discover. The question of fuzzy or firm extensions is simple for those who hold to the

idea of natural kinds since there is a firm definition and *sine qua non* determining factors that provide unambiguous sortals given, where necessary, the suitable equipment for their detection. Above all, the epistemic superiority of natural kinds resides upon their nomological potential for affording sound inferences. If we are dealing with a true natural kind, all sorts of deductions, inductions and abductions are possible with a high degree of reliability.

## 5.2 Historic Kinds.

In fields such as astronomy, physical geography, geology and meteorology physical forces such as gravity, friction, heat and pressure acting (often simultaneously) upon the properties of the natural materials concerned result in mind-independent homogeneous outcomes at different times and places. Asteroids, geodes, ox-bow lakes or cumulonimbus clouds are all historic kinds. Yet such phenomena do not achieve the characteristics of pure natural kinds since the forces motivating them and the materials upon which they act are less uniform and stable over time. For example, iron ores are highly variable in their mineral content and clouds are ephemeral. Yet, in terms of our encounters with the world, historical kinds are far more common than the natural kinds referred to above and are almost invariably thought of as natural kinds in folksonomies (Medin & Atran, 1999). A historic kind is simply a homogeneity that results from some reliable reproduction process in the world that owes nothing to human existence. What a member of the general language community, but not a member of the appropriate epistemic community, takes as a natural kind is more often than not a historic kind. Nowhere is this more evident than in the biological sphere. ‘Species’, a typical ‘natural kind’ to such people, are not invariant over very long passages of time, and are more properly treated as historical kinds, the result of prior events. A horse is a horse because its parents were horses; and they were horses because their parents were..... Furthermore certain characteristic properties of horses are variable as a result of variability of the genetic components involved in the reproductive process and characteristic properties may be inessential ~ a three legged horse is still a horse.

Under this formulation, historical kinds are the product of the forces of nature operative in the absence of humanity. However, there is scope for human intervention in an open system that governs the homogenizing or reproduction process (as distinct from

the intervention in a closed scientific experiment which is always possible for natural or historic kinds). The stud farmer or rose breeder are able to impact upon these natural forces and this is more than the obstruction or destruction that might be found with mankind's dealings with natural kinds; here there is potential to share and shape the natural forces. Rather than create a new sub-division between human mediated and unmediated historic kinds – which is unnecessary for our current purposes - we shall accept that humans may be one of the shaping forces at work. (Although it is possible to extend this idea of human-mediated historical kinds into the social realm and refer to, say, reproduction of the Mona Lisa or a branch of Marks & Spencer as a historic kind, they are dealt with as artefacts and institutional kinds below as more salient features for our purpose. As pointed out by Bowker & Star 1999, another form of historical kind is that of language itself. We traditionally apply a historic principle of 'descent', as in genetics, in sorting the languages of the world ~ Nilotic, Indo-European, etc. Again, the approach here is to regard languages as social kinds).

Historical kinds, therefore, are close to natural kinds but fail to be as 'pure' in terms of sharing identical properties and being invariant over human timescales. The distinction as recognised here is that a historic kind is one where some force(s) other than mankind is(are) causing the homogeneity and that this extends beyond some single characteristic property to the likelihood of many similarities. A mixture such as sea water or grass can be a historic kind. Thus, whilst natural kinds must share some single essential property, historical kinds may be similar on a range of discernable characteristics without necessarily sharing any single one of these. Thus the sortals are, or can be, fuzzy and the definitions work more by convention than precision. In consequence the extension or boundaries of historic kinds are prone to error. However, given correct extension, there are few problems in reference to historical kinds; they are all around us in the observable world. There may be a greater degree of uncertainty about sorting criteria to determine the historical kind category concerned when compared with the procrustean definition of natural kinds. But, if the identification of the extension of the kind is correct, the entities so determined are amenable to certain reliable inferences and can thus carry sound nomological potential. The overall properties and potential behaviour of historic kinds can be reasonably predictable.

### 5.3 Moving on to 'social' kinds.

The two kinds discussed above – the natural and historical kinds – are both typically associated with the sciences, essentialism, firm sortals and causation extrinsic to the classifier. They are what some, following J S Mill, would term ‘real kinds’ in that both are ontologically mind-independent. Whilst social kinds are not ‘real kinds’ in the Millian sense, it is argued here that, notwithstanding their mind-dependence, social kinds can be every bit as real as natural kinds in their consequences. It is also possible that with greater scientific progress certain historic kinds may become viewed as natural kinds. Alternatively, scientific discovery may downgrade what were hitherto taken to be natural kinds as being historic in that the essential discerning feature is found to be misleading or illusory in some way.

We now turn to three kinds that result from human interventions in the world and are thus irreducibly mind-dependent and are related to our intentions. They are termed ‘social kinds’ in that they would not have existence, except perhaps as relics of past societies, were humans not existent with projects in mind. The first of these kinds, however, is simply a human consequence in the world that results without intent; it is the by-product of other intentions. This is termed an ‘unintended kind’ and is treated very briefly below. The other two are kinds that result from human intentions. The first type are termed ‘artefactual kinds’, where the phenomenon is (usually) concrete, and the original motivation is usually individual, albeit a team may be involved in the realisation and subsequent reproduction of the kind. The second type are the ‘institutional kinds’ where the intension is inescapably collectively determined and where the kind may be concrete or abstract. Since business strategies are essentially of the latter type these two sub-kinds are treated separately. It may also help to know that Searle distinguishes between artefacts and institutional kinds in that the latter are interactive with their kindhood or ‘self-referential’. Similarly, Hacking (1999) draws the distinction between artefacts as indifferent to their categorisation ~ a chair is not altered by the label attached to it ~ whereas institutional kinds such as ‘star pupil’ or ‘feral youth’ may behave differently as a consequence of their categorization; what he refers to as ‘looping effects’. Bowker and Star (1999) describe how a group of individuals in an occupation such as nursing will behave in a particular manner in response to the acquisition of its status as a profession.

Before, however, discussing the various types of social kinds there is the fundamental question of whether such kinds must be ‘unreal’, in the sense that being socially caused and socially picked out there can be no justifiable claim to mind-independence. This issue is addressed further in Chapters 2 and 3, but for the present it can be asserted: - First, (Searle, 1995; 1999), that there are social features of the world that are epistemically objective social facts and just as ‘real’ and causally potent as natural features, albeit their reality is intrinsically different, as will be discussed below. Secondly, that some social objects exhibit similarity due to the causal powers of social structures and processes that engender homogeneity (Bhaskar, 1979; Elder-Vass, 2007, 2010; Gindis, 2009; Harré, 2002(a)). They resemble one another in some salient respect due to procrustean forces operating in social affairs. And, thirdly, the results of such homologation are operative, whether the similarity has been noted or not, i.e. that real social kinds can be ‘discovered’ as well as ‘invented’. Real social kinds can exist, due to these ‘homologating forces’, but not all social categories are real social kinds.

#### 5.4 Unintended Kinds.

A key dimension used below as applicable to the discussion of social kinds is that of the intentions of the humans that provide the motivation or power behind the creation of similarities and homogeneity in the (social) world. So it is necessary to discuss, very briefly, those phenomena that display regularity and commonality but which are the by-products, generally unintended, of other intentions. Following Thomasson (2003) let us take the example of a ‘path’. Now, one can consciously set out to build a pathway across the lawn from the back door to the compost heap at the back of the garden, and the path that results is clearly an artefact. However, one may create a ‘path’ (i.e. something another person would apply that label to) across the lawn by the intention of reaching the compost heap; not only is the resulting path worn through the grass unintended, it may be viewed as highly undesirable. It could even be that the motivation for our artefactual path was to avoid wearing out the lawn. Although this is a somewhat minor point to create a ‘kind’ around, there is particular salience in business strategy since the kind ‘unintended strategy’ (Mintzberg & Waters, 1985) is both a concept and term well recognised in discussion of strategy classification.

#### 5.5 Artefactual Kinds.

Such kinds result from human intentional impositions upon material substances. They are the product of human purposeful interaction with the material world, rather than being the unmediated consequences of nature's forces. Normally, this involves an object produced by human art or workings for some clear purpose, either functional or decorative. The motivating force can be an individual's intention, the intentions of a group of people fired by the motivation of a single member, or it can be the intentions of an organised set of individuals within an institutional kind such as a factory or office. The intended fruits of engineering and applied sciences in production and of more individual arts and crafts are artefactual kinds:- a chair, some wine, an aeroplane or a motorway. That word 'intended' distinguishes artefacts from accidental by-products such as sawdust, (an unintended kind), but also allows for mistakes in the execution of the intention as in the wonky and misshapen chair that looks nothing like the original intention of the novice amateur carpenter (Thomasson 2003).

The notion of 'kind' obviously entails that there is some similarity or homogeneity amongst these artefacts and the motivating force of a social kind is a human intentionality that is social in the sense that it follows an intersubjective consensus. Where this is to make another one 'like that' we must have in mind the prototypical specimen, the socially held concept of what 'one of those' relates to. This Thomasson terms the 'substantial concept' of what a particular kind of artefact will be in terms of function and form. This provides the design element in the maker's intention and, as long as this is reasonably efficiently executed, creates an artefactual kind. Furthermore, the recognition of that design component in any artefactual kindhood permits one to conclude that an individual may consciously create novelty: that 'like that' can become 'like this', and that 'one of those' can become 'one of these'. Thus innovation and creativity (perhaps motivated by search for recognition or for improvement, efficiency and profit) can be a source of the evolution in the reproduction of artefactual kinds that largely match previous versions, yet allowing for change. For example a 'key' was once invariably a metal object that interacted mechanically with a lock, and such keys abound still today. However, the key to my car is an electronic signal and that to my hotel bedroom a plastic card. Function has been retained or enhanced, but form is radically different.



It also helps to distinguish an artefactual kind from a concrete institutional kind thus:- Concrete institutional kinds (as will be seen below) are objects where a function has been imposed upon an object by collective intentionality that is not a direct consequence of its material composition – A goal post is an artefactual kind. A jumper is an artefactual kind. But a jumper can become an institutional kind where, by the agreement of the players in the park, it stands for a goal post. Many institutional kinds are abstractions imposed upon token material artefacts, such as £10 notes or marriage certificates. Harré (2002(b)) draws the distinction between wine as an artefact and communion wine as an institutional kind. Conversely, it is also possible to construe certain human non-material products, such as a symphony, as an artefact, in that it is the product of human intentional effort and stands for what it is, without standing in for something else.

The treatment above indicates that the protean nature of artefactual kinds makes problematic the setting of boundaries. There are no natural boundaries to enlist. Form itself in terms of structure, shape, materials, aesthetics etc, can be highly variable and is an unreliable sortal, especially where it is not unknown for a functional object to be deliberately made to look like something else. Function as the holder of intention, or teleological purpose, is the more important as a classification principle; but a single artefact may combine non-separable functions that can, in addition, also overlap other artefactual kinds. Our notions of artefactual kinds confront blurred boundaries and uncertain extensions. So, it is somewhat inescapable that one ends up looking to consensual, socially held definitions where sorting is contextual and spatio-temporally determined. Our notions of what constitutes a ‘chair’ is somehow acquired through enculturation; from the child’s alphabet picturebook version – hard, four legs, flat and horizontal seat, wooden construction – to the chair on which one sits at the computer – soft, a single pedestal, five wheeled feet, seat adjustable for height and rake, steel, synthetic foam and cloth. There are immense cognitive challenges in the derivation and interpretation of any ‘generic’ for even such a simple artefact as a chair (as those grappling with computer visualisation recognise).

The types of discipline one most associates with artefactual kinds are those of the crafts and the applied sciences – architecture, engineering, printing and design, fine art and textiles. Furthermore, despite their quotidian nature, our knowledge of

artefactual kinds is also a function of our interest therein. A tailor might classify ‘jackets’ in a dozen or so ways, whilst her customer uses the same word to cover all. This highlights another important feature of artefactual kinds (one that is shared with institutional kinds); that ‘there can be no reference to the kind without someone having a relevant concept that in turn plays a role in determining the term’s extension’ (Thomasson, 2003, p 604). The variety of human intentions and the protean nature of artefactual kinds and their fuzzy boundaries means too that, compared with ‘scientific’ kinds, there is a lower expectation of reliable extension and more limited valid inference about their properties and behaviour. There is, however, one very important rider to this observation – if the artefactual kind is produced by some regulated or homeostatic process such as machine manufacture there is likely to be very considerable similarity between individual artefacts so produced. Here uniformity and reliability is built into the system.

#### 5.6 Institutional Kinds.

Institutional kinds cover social collective constructions that exert powers in society through its intentionality that they are empowered so to do. There are two sorts of recognised institutional kinds; the concrete and the abstract, or intangible, dealt with separately below. First, however, some explication of ‘intentionality’ and ‘social construction’ is required. Intentionality is a mental state of willing a purpose; it is an aim in mind. An abstraction such as this cannot be directly observed, only the consequences in behaviour are discernable. Nor, given their individual mental status, can there be joint ownership of intentions without their expression in some external form – usually language, but including all semiotic means of communication of meaning embodied in both material and insubstantial, but sensible, things. Thus, it is argued here, collective intentionality, a *sine qua non* of modern society, is made possible through various concrete and abstract institutional kinds at work in society. But it also was itself responsible for creating those institutional kinds in the first place. Society is the product, inter alia, of the interacting institutions created by building upon earlier institutional kinds, from the Burj Khalifa in Dubai back to the Parthenon. And it is in this sense that it is possible to write of the social construction of the modern, highly collectivised, world. Indeed it is only through the operation of collective intentionality that culture is possible. John Searle (1995; 1999) is the prime source of authority here,

albeit others have refined and re-formulated his notion of collective intentionality. (Elder-Vass, 2010; Gindis, 2009; Thomasson, 2003;).

Searle writes of the way in which we can assign functions to substances or concepts that are over and above their intrinsic properties or content. Thus, the assignment of roles in society, including that of ‘Registrar’; a declarative speech act, such as ‘I now declare you man and wife’; coupled with certain acts like the giving and receiving of rings; and the inscriptions of signatures on a piece of printed paper called a ‘Marriage Certificate’; can all combine to act with enormous power and consequence in our individual lives. This Searle explains as the collective agreement upon these actions as being constitutive of a role of being married. Where the assignment of functions to, for example, roles, words, rings and printed paper all amount to an institution of marriage. This is summed in his expression that covers all such acts of collective intentionality that confer function ~ ‘X counts as Y in context C’ ~ or, to revert to an earlier example, a jumper can act as a goal post as long as the parties agree to, or intend, this being the case.

Importantly, not only does the ontology of institutional kinds fail (by definition) any test of mind-independence, they also fail on the same grounds to have natural boundaries to set their extension. The extensions or sortals for institutional kinds are not ‘discovered’, because they are not ‘out there’ to be discovered. They are instead defined in their intersubjective agreement on what constitutes the kind’s boundaries. Further, provided the collective understanding is owned by the relevant epistemic community the sortals or extension, whilst ontologically challenged, are beyond gross epistemic error – Thomasson, phrases this as; ‘if we collectively accept any set of conditions C as sufficient for there being a [kind] K, it could not turn out that we are wrong. [In that] .....given that acceptance, if the acceptance conditions are fulfilled, there is some x that is K’. (Thomasson, 2003, p 589). Hence a concern, evident later in this work, in knowing how (well) strategy classifications are delineated and communicated when first proposed.

Finally, as Thomasson (2003) points out, it also follows that, given the mind dependence of such kinds, we can be in gross epistemic error about them where the criterial conditions are not fulfilled. The Registrar may be an impostor, the Marriage

Certificate a fake, the groom a bigamist. When the impostor, fake or bigamist are exposed as such, what happens is that the constitutive rules are shown to have been broken;- that X did not after all count as Y, or the context was not C. The collective intentionality has broken down because the function was not conferred. This marks an important difference with real kinds. Whilst real kinds can exist unknown to society because we are in ignorance of the existence of their motivation, such cannot by definition be true of institutional kinds. If it is true that we collectively accept that a putative member of such a kind can and does meet the sufficient conditions that we have laid down for its existence, then it exists, full stop. Put another way, and relating this to business strategy classifications, if just one organisation meets the stipulated conditions for being, say, a 'Defender', then such a category's existence is beyond doubt. In these matters the differences between real and institutional kinds as regards extension and falsification are highly significant for our epistemological practices.

#### 5.6.A Concrete Institutional Kinds

The creation of concrete institutional kinds such as £20 notes or driving licenses involves the creation of constitutive rules which specify general conditions under which anything that meets those conditions qualifies as belonging to the kind. Thus, the extension of such kinds can be fairly determinate; albeit the constitutive rules may themselves prove less than exact, and it is possible that the rules themselves are subject to dispute or, as discussed above, were broken. For remember the rules are collectively held and, whilst some may be precisely defined (as by law), others, like jumpers for goal posts, are transient and contextual; they are local rules. Even where the rules are precise, the consensus that holds them to the case can break down, and the reliability of individual agents respecting the rules is weak ~ the existence of laws does not guarantee their observance, as anyone can observe in motorway traffic. This is in complete antithesis to natural and historic kinds and offers a lesser, but still potent, contrast with artefactual kinds. The reliability of inferences about concrete institutional kinds is subject to considerable subjective judgement about the conditions obtaining in their constitution and the circumstances and motivations of the individuals and the kinds involved. The laws of nature, even when they remain obscure to us, are more reliable in their manifestations than are social rules. One may lose faith in Zimbabwe dollar, but not in the value of the sweetcorn one is attempting to buy.

### 5.6.B Abstract Institutional Kinds.

In addition to the institutional, or socially constructed material kinds as described above, there are institutional entities that depend upon the creation of new abstract institutional kinds. What creates such kinds is not the ascription of new functions to a particular material object, but the acceptance of certain constitutive rules regarding such activities as ‘passing a law’ or ‘establishing a football club’ that endows society with the capacity to create a new abstract social entity such as ‘The Road Traffic Act’ or ‘Millwall FC’ (Thomasson, 2003). Albeit that it is usual to associate certain tokens with the existence of such abstract institutional kinds ~ the yellow lines or speed restriction signs by the roadside, or a club mascot, shirt or web site ~ these are not concrete institutional kinds, since the abstract entity would exist without these tokens, or with an alternative set.

Organisations, and in particular corporations, an abstraction of a ‘person-like’ socially constructed entity under the law, are an abstract institutional kind case in point (Gindis, 2009). And strategies, ~ the collectively agreed selection of activities and their means of execution to achieve collective and abstract goals ~ are the motivating forces within corporations that constitute collective abstract institutional kinds that are particularly challenging to classify (See chapter 2). We are dealing with a projectable abstract property of an abstract entity.

There is a ‘pooling of wills’ to create the joint commitments and associated normative guidelines for shared obligations and rights that is found in organisational life. This is more often implicit than explicit in the collective intentionality involved here; such that the setting of boundaries and definitions for abstract institutional kinds is more challenging than for concrete ones. It is easier, for example, to intersubjectively agree that a piece of A4 paper printed with certain symbols constitutes a particular kind ~ an ‘invoice’ or a ‘degree certificate’ ~ than it is to establish a common agreement as to what constitutes a ‘debt’ or a ‘higher education establishment’. This means that the reservations expressed above concerning inferences regarding concrete institutional kinds apply with even greater force to abstract institutional kinds.

### 5.7 Some implications.

This attempt to define kinds of kinds is a nominal classification of diverse phenomena as falling under descriptions that follow in very broad terms the manner in which subjects or disciplines are construed, say, by a University or an encyclopaedia. This is not accidental, in that an element of this thesis will be that the distinctions sketched here are highly consequential for the nature of the truths we pursue in all academic fields and the manner of that pursuit. Overall, and despite their sometimes highly contentious nature within that community of practice, the physical sciences (physics, chemistry, biology, geology, meteorology, engineering and the like) know their real kinds and treat them appropriately in measurement and experimentation. The arts and humanities, lacking real kinds in the main, tend to recognise the human contingency of their artefactual kinds and the subjectivity of their institutional kinds and do not ape the methods of the sciences since it is patently evident that closed experiment and quantitative analysis have little enlightenment to offer.

By and large, the social sciences (economics, business, sociology) have paid little heed to the complex and context-sensitive nature of their predominantly institutional kinds, whilst subconsciously adopting a quasi-scientific set of expectations about them as received facts (Lawson, 1997, 2003). Expectations which, as explicated above, are largely unjustified. Their research methods are frequently indifferent to the true nature of the conceptualisations and classifications that underpin their subject matter. In reality, social scientists are more likely to impose categories on their objects of study than to ‘discover’ categories lurking within them. This imposition of categories is a little acknowledged part of the normal *modus operandi* of a social scientist in making sense of the material and presenting his or her work. The term ‘findings’ almost inextricably connotes the discovery of something within the material, rather than the researcher’s own fashioning of a useful lens through which to interpret it. These impositions will, of course be de-contextualised and reified by the next generation of scholars. Subjectivity masquerades as objectivity. To make for social progress, rather than constant re-interpretation of self-referential social matters, we need to give greater recognition to the distinctive and problematic nature of our institutional kinds and act accordingly.

This discussion has been given life by what is at core a philosophical debate regarding the very nature of kindhood; and that debate is animated largely by the fault lines about their ontological foundations, set especially around the essentialism / nominalism divide. It has culminated here in a proposition that it may prove more productive to recognise that there are different kinds, and that these differences are consequential. In chapter 3 classification systems employed by those constituting the epistemic community concerned with the social realm are seen as variegated in their nature, as are kinds, but are also viewed as devices or heuristics that aid in the drawing of inferences from the resultant kinds without imputation that the resulting categories are kinds in the sense described above. The making of classification systems is inescapably a human imposition upon the world and one where we can select and fashion to our purposes. All kinds are categories, but not all categories are kinds. This raises the question; why do we create classification schemes ?

## 6 THE CONTRIBUTION FROM MAINSTREAM ORGANISATIONAL AND MANAGEMENT SCIENCE.

At the outset, the natural start point for this study was the literature dealing with classification of strategy or, more generally, the categorisation of phenomena in management and organisational science, and the texts describing research methods in this field (e.g. Easterby-Smith et al, 1991). But, as remarked in the introduction, this literature ultimately disappoints. It tends to describe the handling of (data) categories as derived, for example from observer categorisations or structured questionnaires, but lacks deeper consideration of the ontological origins of the similarities picked out in these researcher-constructed categories. The critique adopted here is more challenging in examining the source(s) and uses of categories; it deals with issues mostly not problematised in existing studies, and goes beyond the treatment conventionally found in mainstream organisational and management literature. Notwithstanding this lack of penetration in such literature, however, there are certain basic points of principle and terminology concerning classification in the social sciences that underpin the reporting of the findings of this research, and it is important to establish the outline of these fundamentals. They provide the point of departure for the deeper exploration that follows in Chapters 2-7.

### 6.1 The nature of classification schemes.

Classification schemes are artefacts. As deliberate human creations, they are inextricably bound up with our need and desire to acquire and apply knowledge about the world and, as discussed in regard to cognition and linguistics in Chapter 2, to do so in an efficient manner. In this case, knowledge of the social world of institutional kinds within the domain of organisational and management science. Whilst, in Chapter 3, the fact that these schemes may serve different purposes is elaborated under four headings. However, the purpose of all such classification, in general terms, is to divide a set or population of items within a specific phenomenon (companies, costs, leadership styles, projects, etc ) into meaningful sub-groups or categories that share some salient characteristic(s) on the basis of which some reduction of complexity and improvement of data manageability and comprehension can be achieved. The resultant sub-groups are alike, in some significant respect, within the category and significantly different, at least in that respect, from other items within the set or population. In other words, classification involves the sorting of entities into sub-groups on the basis of similarity, seeking to minimise the within-group variance and maximise the between-group variance. The aim is internal homogeneity and external heterogeneity leading to the possibility of reduction of variation and complexity and, thus, simplifying the management and analysis of the population.

A classification system consists of a number of categories and a specification, or algorithm, or set of heuristics, to determine how entities should be allocated or sorted among the categories. It is a general aspiration that:- (a) The division criteria (sortals), and, hence, category specification enable meaningful distinctions to be made. The classes are mutually exclusive and entities belong in only one class; (b) That there are categories to cover the main bulk, if not entire, domain's contents. The classification is exhaustive in that there is an appropriate class for each entity within the entire population. Classification is more challenging where the phenomenon of interest may be intangible and inferred, or what Lazarfeld & Henry (1968) term 'latent', with no discernable external direct signifiers their presence. In the abstract, specialist field of corporate and business strategy, the objective of classification is to achieve a parsimonious concept which will help to simplify by means of categorisation the variety



of strategic behaviours arising from differences in the resources, motivations and methods of the dominant coalition of senior management within a multitude of large and small organisations. The resulting divisions must be based upon fairly superficial and arbitrary criteria, or the categories based upon a subtle and intuitive interpretation of emergent direction and choice, or some combination of the two. Either way, it is more problematic than a system of classification based upon physical features.

Much has been written, within the broad sphere of management science methodology, on the subject of classification of organisations and their strategies. For example, Carper & Snizek, 1980; Conant et al, 1990; Doty & Glick, 1994; Hambrick, 1984; McKelvey, 1975, 1979; Oliver, 1982; Pinder & Moore, 1979; Pugh et al, 1969; Snow & Hambrick 1980; Venkatraman & Grant 1986; have all written on the classification process as well as, in some cases, offering their own findings. Whilst authors such as Chrisman et al, 1988 and Kald et al, 2000 have attempted to synthesise classification systems developed by others or, such as Galbraith & Schendel, 1983, to devise their own empirically based strategy classifications. Despite such work, the absence of a consensus upon the appropriate classification scheme(s) for the phenomena of business strategy leaves us with a number of contending perspectives and, oft-times, contradictory terminology. There is a *de facto* plurality of co-existing and competing business strategy classification schemes, but little ground in this literature for discrimination between them. One major methodological divide is that deriving from the basis upon which the classification is initially conceived ~ typologies versus taxonomies. This is an area where the ‘semantic confusion’ about terminology, is rife. The interpretation given in sections 6.2-4, is based largely upon Bailey’s (1994) monograph on classification in the social sciences and his other writings on this topic (1984); but draws additionally upon Ackroyd & Hughes, 1992; DeVellis, D, 1991; Gregor, 2006 Hessler, 1992; Sills, 1968; Smith, 2002; Sneath & Sokal, 1973.

## 6.2 Typologies.

The start point for a typology is conceptual. It is a process of classification based upon either some notion of the extreme or ‘ideal’ archetype, setting out the pure, perfect and simplified characteristics of the feature or phenomenon of interest. Or, it may be based upon the description of a ‘representative specimen’ of the category, which need

not, in fact, be represented by any particular empirical entity. The individual categories, cells or ‘types’ are deductively arrived at and, in essence, are often idealised typifications of the entity population. It is possible to construct a simple typology from a single characteristic of the entities comprising the population to be classified. For example the strategic position of companies as seen from their market share relative to the largest competitor might result in the creation of two or more cells – Strong, Tenable, Weak, etc. However, typologies are generally portrayed on at least two dimensions to create unique cells in conceptual space, termed the ‘property space’. (The tendency is for strategists to stick to just two dimensions and two scale points, giving the 4 cell classification diagrams typically scattered throughout the textbooks.) Yet the construct itself, in creating the types and associated labels yields a new set of descriptors as nouns. The classifications are generally verbal and qualitative and often derive their potency from the labelling associated with the categories so defined. Hence the risk, ever present, of reification.

Despite the *a priori* origination of a typology, there must be some experiential familiarity with specimen forms or activities for such concepts as the ‘ideal type’ (a polar extreme, or perfect reflection of the class at maximum or minimum extent on the selected criteria) or the ‘constructed type’ (a central example, a representative example, or typification, whether real or synthetic, of the characteristic occupant of a cell) to be postulated. Thus, a typology is not created from a vacuum. As mentioned above, the format of a typology in business strategy is frequently from two conceptual dimensions (such as ‘customer’ and ‘product’) with just two scale points (‘existing’ or ‘new’) to create a four box cell (the ‘Ansoff Matrix’) with simple labels to each ~ ‘Product Development’, ‘Diversification’ etc.~ (Ansoff, 1965 ) It is the generation and juxtaposition of the, (generally, unquantified) dimensions in labelled conceptual space that distinguishes a typology from its cousin the taxonomy.

Any individual member of the population can be allocated to a particular category and the categories are distinctly compartmentalised by means of, as far as possible, unambiguously specified characteristics and a unique label (O’Keefe, 2007). They are designed. It is a top down deductive process, from the conceptual framework, to the specification of the type, to the classification of the individual entity. The key to a successful typology is to have characteristics that are mutually exclusive

and discrete rather than overlapping and continuous. Like the design of a suite of pigeonholes, the classification system, once constructed, is fairly rigid and change involves de-construction and re-design. Typologies are, therefore, somewhat procrustean in their operation; in that the member of the data set may have to be somewhat forced into the category nearest to that matching its characteristics or somewhat arbitrarily separated from similar entities by falling either side of the specified division. This 'forced fit' problem arises particularly with the application of two of the case study business strategy classification schemes:- Miles and Snow's typology and Porter's generics (see Chapters 4 and 5). It is not possible to allocate to partial or multiple categories within a typology; just as it is not possible to allocate a single parcel to more than one pigeonhole. Yet, given the conceptual origins of the typology, it is quite possible to create type classes for which there are no empirical examples. (e.g. the female Pope). The elimination of superfluous cells is termed 'reduction'. The regeneration of a complete typology from knowledge of only part thereof is termed 'substruction' (Bailey 1994).

### 6.3. Taxonomies.

The start point for a taxonomy is empirical. It involves the recognition of discernable similarities of entities within a population to form categories and the ability to distinguish the similarities and dissimilarities of such categories to one another such that, where appropriate, a hierarchy can be built. It is a bottom up inductive classification system. In contemporary statistical taxonomy the classification criteria are usually dimensions or discrete data of some sort, and individual categories or taxa (singular; taxon) are inductively derived from empirical data, arising from precise, comparative measurements or careful discrimination among the various delineations of components / elements of the individual entity. As with all classification, the aim is to minimise within group variance and to maximise between group variance. In the social sciences, taxonomies are generally derived *a posteriori* by computation using statistical techniques such as 'clustering' or regression based upon analysis of association and variance among empirical measures or dimensions gathered for such purpose. The relationships between the dimensions or elements that constitute and define the taxa are 'discovered' and rationalised to give discrimination in the subsequent application of such taxa, and labels affixed to give ease of identification and management. It is

unlikely that redundant taxa will be produced in that each taxon is the result of empirical investigation. Despite the appeal of statistical validity that may be associated with taxonomies, they may lack statistical reliability in replication; are difficult to label appropriately (group 'G5a' v 'Defender'); and sometimes disclose correlations that are counter-intuitive or irrelevant. In short, the classification system may not find immediate resonance and acceptance by potential users. There is seldom an easy way to generalise. Taxa are not types.

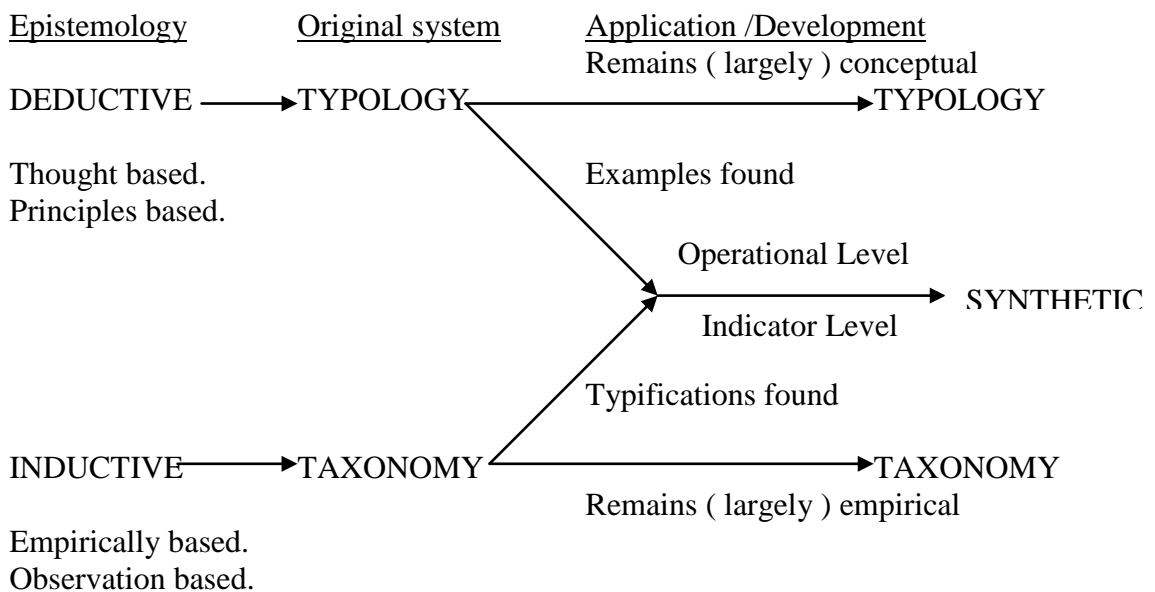
Epistemic practices in biological classification and in information science are often based upon taxonomic approaches. In the social sciences, the position of taxonomies is less clear. A very significant activity that generates quantitative taxonomies is cluster and multivariate statistical analysis, found across the whole field. However, despite yielding taxa for research purposes, the applications in the strategy research field seem not to have passed over into general classification systems for business strategy. (Some discussion of DeSarbo et al's 2005, 2006, attempt to classify business strategies taxonomically is given in the case study discussion of the Miles and Snow typology). Overall, there is a marked propensity for business strategy theorists to suggest (different) typologies rather than specific taxonomies.

#### 6.4 Instrumentation.

The above is a simple typology of classification systems that sets out a conceptual dimension of induction / deduction and posits as polar types the taxonomy and typology as described above. Practice often creates a synthesis of the two, both in the origination and the subsequent development of the classification system. Bailey (1994) relates this to the 'level' of analysis, with the abstract/conceptual at one pole and the concrete/empirical at the other. He terms the intermediate or composite level the 'Indicator' or 'Operational' classification and we, thus, find that much of the classificatory systems in use in strategy, organisational sciences and social science in general as having the characteristics of both. See Figure 1.1. They tend to start as types or taxa, but, over time, are synthesised, as suitable empirical examples are found for types and higher levels of generalisation or composite, simplified measures are found for taxa.

Consider, for example, the design of a market research questionnaire: there is inevitably some conceptual ontological and epistemological basis for the selection and definition of the population to be sampled, the data to be collected and the envisaged subsequent coding and analysis. This will invoke both typological and taxonomic considerations. The concepts of interest may be frequency of shopping trips, means of transport and average spend. In the composition of the stratified verbal categories ( ‘daily’, ‘two or three times a week’, ‘weekly’... ‘never’, etc ) the prompts represent points on a univariate scale of frequency. However, the responses will comprise part of the empirical data for taxonomic analysis and a possible multivariate cluster will form a taxon within that analysis ( ‘two or three times a week’, ‘by car’ and ‘over £ 100 ’ – a taxon that might be labelled ‘Frequent, High Spender’ ). The taxonomy is derived from analysis of the ‘relevant’ data ~ we ask about a respondent’s car ownership since we impute some relationship with shopping habits; whereas we do not ask about shoe size, or education since we impute none. It all rests upon tacit theories.

FIGURE 1.1. SYNTHETIC CLASSIFICATION SCHEMES.



Source : Author, developed from K. Bailey, 1994.

What, however, this instrumentation achieves is often a seemingly plausible set of ‘measurements’ that suit a positivist approach to the subsequent handling of the investigatory process. It plays into a version of scientific epistemic practices based upon an ontology of atomistic natural or historic kinds, but inappropriate to the social realm, and particularly to the abstract institutional kinds of interest here. An ontological

misconception of some consequence. As Ackroyd & Fleetwood (2000) note, there is a tendency to confuse realism with a justification for treating social phenomena in research as if they were natural kinds. Such implicit positivistic assumptions often underpin the organisational and management science methodology literature, such as Bailey, and spills over into the treatment of business strategy classification schemes as is critiqued in the case studies. The base case this thesis explores is that our epistemic practices here are generally mismatched with the ontology of their material.

## 7 CLASSIFICATION AS THEORY

There is another important overlay to the development of typologies, taxonomies and synthetic classifications in our epistemic practices. Insofar as a typology is a purposeful artefact created from theoretical concepts, it is itself a theoretical construct purportedly enabling explanation and prediction. Insofar as a taxonomy is developed from the particular to the general, it too represents a theoretical construct; one of generalisation. Paul Davidson Reynolds (1971), dealing with theory construction, recognised that a typology is a means of organising and classifying phenomena that entails some underlying theory as to what will be useful. (See also Doty & Glick 1994; McKelvey 1975 and Pinder & Moore, 1979 on the relationship between classification and theory development.) Reynolds, further, argues that all substantial, scientific knowledge of a theoretical nature is derived from sets of statements organised so as to constitute that theory. The statements can be organised in such a way that theory is arrived at by what is, in principle, one of only three routes. The first, the set-of-laws route does not concern us here and, since it involves relationships between concrete, measurable phenomena, few business strategy constructs are so derived. (An example, that might qualify, would be the ‘experience curve’ which relates one measurable, that of cumulative quantity produced, to another measurable, that of cost per unit ~ see Grant, 2002 pp253-5 for a brief summary). However, the concern here is with Reynolds’ other two routes – the axiomatic and the causal process forms. As described in the case studies, the Miles & Snow (1978) typology is a causal process based theory (the ‘adaptive cycle’), whilst the generic strategies of Porter (1980) are axiomatic based, drawing upon basic microeconomic reasoning (See Chapters 4 and 5).

In the development of the corpus of knowledge that constitutes the field of business strategy there are strong positivist pressures to subject theory to empirical test. The positivist endeavour that underlies mainstream organisation and management science is to convert social phenomena into tractable types or taxa for quantitative analysis. Journals in the social sciences are replete with articles setting up hypotheses and subjecting them to statistical validation tests. So it is with business strategy classification. For example, Doty & Glick (1994) argue that for a typology to be useful in its role of simplifying, describing and explaining complex, latent phenomena the types must be fully developed and specified such that their first order, or observable, profiles can be measured and subjected to empirical test i.e. quantitative methods can be employed to ascertain the type's validity. This, it will be seen, is a powerful factor in the development, extension and reification of the original classification schemes into what are synthetic (operational or indicator) classification constructs. Strategy is a field where relatively few replication studies have been published (Singh et al, 2003). However, one should also recognise, along with Hubbard et al (1998), that compared with the physical sciences, there is a lower prestige for external replication and replication with extension work in the study of strategic management. In some respects, therefore, the two most prominent business strategy classification schemes examined here are exceptions to the rule, since the follow-up literatures are so extensive. Yet, a review of the follow-up will reveal that the nature of the theory testing as regards these business strategy classification schemes is often based upon a misunderstanding of what such schemes represent.

The ontology of social kinds admits of the possibility of there being real social kinds. A realist approach to organisation and management science is to ask what causal structures and mechanisms must be operative in the world to produce the homologies we note therein. But, as discussed later, there are many different potential facets of similarity that one may observe. The challenge to our epistemic practice is to select those with the most potential utility. It is when the classification systems that we adopt pick out types and taxa that reflect the relevant causal structures of the social world that our discipline can claim to have identified its kinds and can aspire to become a well-founded, progressive science. For only then do our theories and our epistemic practices match the ontology of our subject material.

## 8 PLAN OF THESIS.

The remainder of the thesis comprises the following chapters: Next is an attempt to define the subject matter ‘business strategy’ and provides a summary of the various viewpoints ~ drawn from philosophy, linguistics and cognitive science ~ which underpin this analysis of attempts to provide generalised categorisations thereof. The following chapter provides a discussion of the ways in which classifications of various types are applied in this field. Then follow three specific case studies of attempts to classify business strategy that draw upon the theoretical framework provided in the preceding chapters. They are the Miles and Snow typology, Michael Porter’s generic strategies, and Henry Mintzberg’s comprehensive framework. (A further case study ~ Cliff Bowman’s ‘customer matrix’ and its incorporation in the ‘strategy clock’ ~ is provided in Appendix 4). Finally, certain findings and suggestions are presented as to the nature of this material and how current and future attempted conceptualisations of business strategy classification schemes might be presented and employed.



## Chapter TWO

### **BUSINESS STRATEGY: OBJECT AND LENSES.**

*‘According to accommodationism, the real definitions of natural kind terms, and thus the reference relation, are determined by the (epistemic reliability enhancing) features of actual linguistic, classificatory and inferential practices.....The nature and reliability of such practices thus depends not only on the conceptual resources, theoretical commitments, and referential inclinations of the relevant practitioners but also on the actual reference-grounding causal interactions they have with their subject matter.’*  
(R Boyd 2010)

#### 1 INTRODUCTION.

We can only intersubjectively know business strategies by a set of defining words (‘a short-haul, point to point, low cost airline’), or by an exemplar (‘like easyJet’) or in contradistinction (‘not a full service airline flying an integrated network between major airports’). There are many descriptions, both specific as employed by situated protagonists of strategy, or promulgated (as generalities) by the scientists of strategy, for intersubjective discourses. Like preparing a sample for microscopic examination, such descriptions attempt to pin down and stain relevant attributes to reveal an otherwise insubstantial concept as a tractable target of inquiry; to make the intransitive object for detailed examination. It is, in particular, the promulgated general business strategy classification schemes that are at the centre of this work. So first, this chapter deals with the elusive nature of the manifest organisational behaviour patterns which general business strategy classification schemes seek to categorise and label. But, as Hacking (1981) points out, the image seen through a microscope is a product of mind; of the viewer learning how to see. The intransitive object and the observer ~ the transitive component of the pairing ~ create the representation. All knowledge is created from the perspective of the viewer and classification schemes are a means of sorting our perceptions under generalised descriptions.

But, as will be explicated in the first two sections of this chapter, a business strategy is many-faceted and can be viewed from many different angles. So, this is one

of those microscopes with a revolving eyepiece containing, in this case, three different lenses. This one object can be viewed from many different perspectives, here reduced to three root disciplines: – philosophy, psychology and linguistics. Concepts are presented under these three chapter sub-headings (4-6) that throw light upon the processes involved in creating classification schemes and in categorising abstract social kinds. Looking in depth at the origins, promulgation and adoption of the business strategy classifications that form our case studies, gains from an understanding of the relevant contributions that these three disciplines can lend to the viewer. And it is in their application to the field of business strategy – one where consideration of such matters has been in little evidence to date – that the contribution of this thesis lies.

Any object which falls under a description, whether material or mental, has two fundamental properties:- (a) its intension ~ what makes the thing what it is; for a conceptual item, its meaning; ~ and (b) its extension ~ the extent or range of objects which properly fall under this intension. If the object lacks the intension it is outside the extension. But objects can be identical (atoms), much alike (acorns), very broadly sharing some feature (assets), or almost indefinably similar (impressionism in art). For most natural material objects ~ water, tiger ~ the intension and the extension are fairly unproblematic for most of us. However, even here, when absolute precision is needed the intension and, hence, extension have to be specified e.g. as regards purity and isotopic forms (sea water ? heavy water ?) and hybrids (tigon ?). When it comes to mental objects ~ peace, politician, poverty ~ the extension has to be considered with care since meanings (intensions) shade into one another and, without the physicality to determine the ‘thisness’ of the intension and thus the edges of the extension, we rely upon context, or a formal definition. Thus, the extension of ‘politician’ is different depending upon whether the discourse concerns thanking an aunt for a Christmas present, or how one earns one’s living. But, even here, there are many ways of regarding qualifying individuals – A local councillor ? A cross-bencher neurosurgeon in the House of Lords ? A non-elected ‘policy wonk’ ? etc. The term business strategy, as we shall see, has no clear intension or extension. In what follows the description of business strategy is explored by looking first at its extension and then at its intension. This is not as an attempt to settle an age-old subject of contention among strategists, but in order to provide some contextualisation to the object under the eyepiece.

## 2 THE OBJECT – BUSINESS STRATEGY CLASSIFICATION SCHEMES. PART ONE – EXTENSION.

The nature of social science is that many of its more abstract objects are held in mind, not just by their tokens, nor their exemplars, but in our conceptualisations of what constitutes their essence and lies beneath those tokens or examples. Familiar illustrations of such abstract social objects would be democracy, poverty or identity; we can identify examples or symptoms, yet generally construe there to be something that transcends these and represents the core of the notion. This is so even where that core essence is inchoate or only vaguely imagined. Business strategy is a more specialised, but similarly abstract notion and it requires some initial preparation to get the object somewhat more clearly into focus. Strategy affords different approaches to its content. In this section the general nature of strategy and the particular field of business strategy are delineated, largely by differentiating ‘business strategy’ from adjacent terms. In the following section the range of possible perspectives thereon are explored.

### 2.1 Strategy

First, ‘strategy’ is itself a term that is polyvalent, with origins in military conflict, indicating an orchestrated and concerted effort to achieve strategic (i.e. top level, overall) objectives or aims in a particular manner. Where strategic aims are differentiated from tactics by virtue of a greater resource and spatio-temporal dimension. Tactics are a means of achieving strategies. A strategy can be predicated of or attributed to an individual, a position, a top team or the whole enterprise. It is applied in organisational science to all types of enterprises, covering large and small, private and public, for profit or not-for-profit organisations. Following the train of events, or emergent strategy, following the oil spill in the Gulf of Mexico we can talk of Tony Haywood’s strategy, the Chief Executive’s strategy, the BP Board’s strategy, and BP’s strategy. The point to note is that strategy is something intentional possessed of an individual agent or group of agents and intentional objects are neither material nor stable. Immaterial, unstable objects are not easy to identify and classify in a ‘scientific’ manner.

Secondly, whilst in broad usage a strategy can be predicated of anyone’s intentionality, the more common understanding of the term is that the strategy is

formulated and promulgated by someone, or some group, able to direct the actions of others. It can be represented as the command, the policy document, the plan of action issued from the top of some social structure that others are to follow. So predicating a strategy of any social organisation is suggesting that the individuals that comprise the organisation possess a collective sense of concerted direction or grasp of overall objectives sanctioned by the authority and status of the agents that have formulated it. The absence of strategy is anarchy. But the presence of strategy is not guaranteed to be efficacious, or productive of intended results. Authority can be contested or usurped; the rhetoric may not be matched by the reality of resources; execution can be flawed; and circumstances seldom unfold as expected. In other words, even where perceptible evidence of strategy is available, such evidence must be interrogated with care and the association between some token of the strategy and its reality is by no means to be taken for granted.

## 2.2 Business strategy.

Our research interest is ‘business strategy’. As the additional word implies, the context here is (a) one of a commercial organisation operating in a market place, (b) to some degree at least, in competition with other organisations for customers and resources. Albeit the discussion of strategy in this context is likely to offer some relevance to organisations lacking one, or even both, these conditions there are other terms that might more clearly be appropriate. ‘Organisational strategy’ is a broader term that would include; Governmental and public organisations, including educational establishments; other private not-for-profit organisations; or non-competitive, yet commercial, organisations lacking competitors or where competition is controlled by some regulatory body. So there is one core meaning to our use of business strategy that stands at the centre of this discussion and is separated out from the broader term organisational strategy. None the less, observations relating to the classification of business strategies will, *mutatis mutandis*, apply to other attempts to classify organisations (and much else besides). Whilst the Miles and Snow typology and Porter’s generic strategies are both described here as business strategy classification schemes, the former is more pliable to the broader field of organisational strategy as a whole than is the latter.

There is, in addition, another meaning to ‘business strategy’, certainly when the term is used by the linguistic community of strategists in contraposition to the term ‘corporate strategy’. This is to indicate that, whether the organisation as a whole comprises one business seeking to achieve its goals in one market, or whether the organisation comprises a number of separate business units operating in different markets within the same holding structure, there are two levels of strategic decision-making in play. The first, corporate strategy, is about where to compete; which businesses or markets to be in. The second, business strategy, is about how to compete in the specific business; seen as a market for products or services in which alternative suppliers compete for the demand of one, few or many potential customers. Business strategy is our focus. Here, the observation that what is claimed of business strategy classification schemes is likely to hold relevance to corporate strategy classification schemes applies *a fortiori* to the similar claim regarding organisational strategy made in the preceding paragraph. In fact, the third of the case studies, Mintzberg’s comprehensive framework, as the name implies, embraces both business and corporate strategy.

Other seemingly contiguous terms might be ‘industry strategy’, ‘industry recipe’ and ‘strategic group’. The first term usually implies collective action by firms. The notion of an industry is not merely about shared markets, but also, usually, shared production technologies, and it is not unusual for this commonality to be reflected in joint action by business units through some trade or research association to either defend their common interests against some threat or to pool capabilities to exploit some opportunity. For example, firms in the music industry collaborating in an ‘industry strategy’ to prevent or deter illegal downloads. The second term ‘industry recipe’ is associated with J C Spender (1989) and refers to the fact that there is often a common pattern to be found within an industry as to ways to compete ~ a generalisation of strategies found at the level of the industry. That is undoubtedly a business strategy categorisation, but one specific to a certain industry, whereas our focus is upon more general schemes. The third contiguous term is ‘strategic group’ (Dess & Davis, 1984; Hawes & Crittenden, 1984; Ketchen & Shook, 1996; Porac et al 1989; Porter, 1979). This generally refers to a number of firms operating in the same market in a similar

fashion, often as regards some important functional strategy such as high / low R&D spend or capital investment, or a broad / narrow portfolio of products or spread of markets served. Again, this is undoubtedly a business strategy category, but is both specific to the industry context and is a sub-set, or variety, of the species of business strategy that is being identified here.

Finally here, there is the issue of what may be termed the ‘entrepreneurial strategy’ overlay. A single person (entrepreneur) contracting with other agents at a formal level will have both a business strategy and a corporate strategy. It is simply what he or she does, or instructs others to do, to achieve the self-set goals for the chosen line of business, in the light of emerging circumstances. Whilst this undoubtedly includes a business strategy on the part of the agent, it does not necessarily call for the degree of deliberation in depth nor articulation in managerial discourse associated with the treatment of business strategy afforded in most texts on the subject. On the other hand, it is not unusual for the entrepreneur to require start-up capital from third parties. This, most decidedly, will require a careful and persuasive articulation of the business’s intended strategy as part of the business plan, complete with dates and quantities. The ‘entrepreneurial strategy’ / ‘business strategy’ border is unclear. However, the literature recognises a distinction, and it is common to encounter business strategy and entrepreneurship being taught as separate elements of, say, an MBA. Moreover, it is evident from reviewing the literature that there is a large company orientation to the theory and examples used in discussing business (and corporate) strategy. Accordingly, we here construe a business strategy to be that operated by an established business with a number of employees.

### 2.3 Functional strategies.

A key feature of a strategy is that it is an overarching sense of direction and goal for the organisation as a whole. But, of course, any complex entity will have components and these parts will also require motivation. Strategy is, therefore, also an input to and guideline for the various sub-divisions of the organisation that contribute to the whole. In the case of business strategy it is conventional to term the strategies operated by these subsidiary units or components of the whole as ‘departmental’, ‘functional’ or ‘divisional’ strategies. So, another conceptualisation of a business

strategy is that it provides the glue that coordinates and reconciles these functional strategies and enables the organisation to act coherently. Or, put another way, a lack of success in providing balance, effectiveness and focus of organisational capabilities is generally held to indicate an inadequate business strategy.

Whilst this description implies an apparent ease of discrimination between a business strategy and a functional strategy, in practice it can be more difficult to make the distinction. Where, for example, the functional strategy is particularly strong it can dominate and invert the relationship with the business strategy. If, for example, the managers of production resources dominate the organisation's strategy-making, it is not unknown for a functional strategy, for example, to maximise output, to thereby become the over-riding aim of the other functions (to expand distribution channels, introduce sales incentives, etc) to the overall detriment of organisational balance and long-term success. It is a feature of Bowman's 'customer matrix' that, when presented by others as the 'strategy clock' (see Appendix 4), it privileges sales growth over a more balanced approach to business strategy.

#### 2.4 Stakeholder strategies and the strategy process.

It is assumed in the above discussion that a coherent strategy can be formulated and implemented since all the agents involved in setting and executing the strategy are of a like mind and their authority unquestioned. This can be very far from the truth. First, it must be acknowledged that external stakeholders can be very influential in the strategy-making process. The classic potential division of incentives between the owners or shareholders of the organisation and the professional managers employed to run the business is exhaustively explored in the literature referred to as 'the agency problem'. But, in addition, it can be that major suppliers or customers may have direct and powerful influence upon strategy. Further, the notion that all the internal agents involved in setting strategy will have the same view as to the desired direction for the organisation is hopelessly idealistic. Strategy distributes rewards and challenges, allocates resources and prestige, promotes and relegates cherished ambitions and determines careers. It is a political as well as a rational process. The mantra will be shared organisational success, but the motivations are inevitably personal to some greater or lesser degree.

The analytical, political and managerial processes by which business strategies are formulated, executed and controlled is not central to this enquiry. It is an important strand in the work of Henry Mintzberg, but figures as no more than a backdrop to the case study of his comprehensive strategy (as product, not process) classification scheme. Processes are, however, very much the subject of contemporary writings about business strategy; a growing literature often labelled 'the practice turn' (Eisenhardt & Zbaracki, 1992; Jarzabkowski, 2004; Jarzabowski & Wilson, 2006; Mueller et al, 2007; Seidl, 2007). This has yielded much by way of contextualised observations and consideration of their implications for management, for example for change management processes. But such work has not, so far, produced well-known formal strategy process classification schemes (See, however, Goold & Campbell, 1987). That decision-making regarding business strategy is a contested process of power and persuasion is not denied, merely that we choose here to focus upon the outputs of that discourse. Product, rather than process, is the core focus of the business strategy classification schemes in our case studies.

The distinction between a process and a product classification is, however, not always that easy to draw. For example, the well-known global / local strategies of Bartlett & Ghoshal (1998) concern both the processes of globalisation in large multinational organisations and the product in terms of organisational structures, missions and strategic orientations of strategic business units.

## 2.5 Parallels with biology; phenotypes, genotypes, and environmental change.

One has to acknowledge that the paradigm of classification and how it works is often the lay conception of biological taxonomy. The parallels between biological and organisational classification have been noted before (Hannan & Freeman, 1977; McKelvey, 1979). There are three important points to register here. First, is that when we are looking at causes of homogeneity among strategies there is no equivalent to the reliable (mostly) replication process found in the biological sphere. One exceedingly powerful reason why a starling resembles another starling, is because at the



physiological level they are made the same way from the same sets of chromosomes – they are genotypes. Organisations do not replicate in such straightforward (if complex) manner. Each is *sui generis*, and the result of conscious design choices; there is no equivalent of a mechanistic set of blueprints or genotypes for the organisation and management scientist to discover. However, long before scientists had unravelled the unseen DNA base to species, dating back to the time of Linnaeus, biologists had developed an effective classification system based upon the reproductive systems of plants and animals and their visible structural features, body patterns, etc. coupled with observational data on their behavioural characteristics, often linked to environmental factors. This, the phenotype, was a satisfactory system. Thus, it is not too far fetched to think of reasons in the social sphere why organisations, albeit architects of their own structures and strategic behaviour, might not select similar patterns to one another; i.e. that there may well be ‘natural’ forces at work for the organisational and management scientist to reveal ~ organisational blueprints or ‘phenotypes’.

The second point is that biological classification (‘taxonomy’ or ‘systematics’) is not the placid consensual field we generally imagine it to be. Indeed the principles upon which biological classification systems should be based are frequently the source of much contention between those who would base it strictly upon genotypes, or on phenotypes, or on clades (line of descent from common ancestors) or some pragmatic mixture of all (Dupré, 2002; Wilson, 1999). In this there seems to be a trade off between principles and pragmatism which may well be a more appropriate model for organisational and management science. Thirdly, it should be noted that anthropological studies of biological classification in tribal societies (Medin & Atran, 1999) has demonstrated that ‘folksonomies’, or primitive naming of familiar flora and fauna; (a) often complement the systems developed by scientists and; (b) match them for effectiveness. Indicating, perhaps, that close familiarity and observation has a very strong potential contribution to effective generalisations in the social sciences too.

Another parallel between the field of organisational science and that of biology, is that of a successful fit between organism or organisation and its environment as a determinant of survival and growth. In organisation and management science achieving

‘fitness’ is ascribed to two complementary processes. Internal adaptation of the firm to the requirements of the environment (see Miles & Snow’s ‘adaptive cycle’, Chapter 4) and environmental selection favouring those firms that best meet external resource landscapes. The latter perspective is closely associated with the works of John Freeman and Michael Hannan (e.g. Hannan & Freeman, 1977 & 1986) regarding the ‘population ecology’ of organisations, and aspects of this work regarding ‘niche’ strategies are relevant to later discussion of Porter’s generic strategies (Chapter 5). However, rates of change in the social sphere are far faster than found in most biology (with the possible exception of viral mutation), such that adaptive environmental fit is a very potent arbiter of competitive success. Thus, classificatory frameworks in organisational science are likely to prove less enduring than those found in the field of biology. That is to say that there are potentially sound ontological reasons for the waxing and waning of particular business strategies and their classification schemes that supervene upon the also well-established and separate fact that such conceptualisations are likely also to be subject to the fads and fashions of management science (Abrahamson, 1996; Abrahamson & Fairchild, 1999; Scarborough & Swan, 2001).

## 2.6 Classification structures and the biological mind-set.

Implicit in the above explication is a picture of a branching hierarchical classification system (*‘genus et differentiae’*), as applied in biology, extended by analogy to social science. In biology we refer to levels;- varieties, species, genus, phylum, domain, kingdom and the like; and we need something similar for strategy. There is, however, no ‘overall picture’ in the social sciences as there is in the Linnaean system in biology. We, thus, have to place business strategy somewhere on this mental structure. In empirical studies of real language classification hierarchies (Lakoff, 1987; Taylor, 2003) it is found that there is a ‘basic level’ (cat or chair). It is the one most frequently used in general discourse and the one first called to mind when subjects are asked to suggest an exemplar. (It is often also the shortest word in the hierarchy that contains it). This contrasts with the higher or superordinate generic classification, ~ a hyperonym ~ (‘household pet’ or ‘furniture’) or lower level, subordinate category (‘Siamese cat’ or ‘rocking chair’).

For convenience, and somewhat arbitrarily, we have selected the specific choices of strategy (low cost, defender) as the basic or species level, allowing for possible industry recipes / strategic groups ('no frills' or 'flag carrier') at a subordinate, sub-species (varietal) level. It is, thus, the 'genus' of business strategy as a whole that is the superordinate term, the hyperonym, whose extension we are examining. It is the superordinate term 'business strategy (genus)' that is broken down or segmented into basic individual 'business strategy (species)' categories, in our classification schemes. Compared with the 'basic' level of species in biology, however, we have a fairly elevated conception of the extension of business strategy *per se*. This, it must be stressed, is at the most abstract and generalised level of similarities across all industries where contestable markets are found. Our unit of analysis is the small set of similar individual strategies found at the core of a vast range of different types of competitive contexts. These are highly abstract homologies found across all types of industries. Thus the biological analogy of species / genus could prove misleading in one respect. We are looking at something much broader; equivalent, perhaps, in biology to the carnivore / herbivore / omnivore categories.

Ali Khalidi, (1998) terms such high level hyperonyms 'cross-cutting kinds'. His paper refers to the phase categories of 'gas', 'liquid' and 'solid' that cut across the Periodic Table, and the entomological categories of 'larva', 'pupa' and 'imago' which cut across the Linnaean categories. They are, claims, Ali Khalidi perfectly sound classifications that provide greater inferential power and scientific utility than would be the case had they been deemed merely a nominal convenience. The same argument is advanced here in relation to the behavioural kinds of business strategy classification schemes examined in the case studies.

## 2.7 Business strategy classification schemes as extensions of fuzzy categories.

Our approach to focusing the target object that is the business strategy genus is the identification of the individual business firms or business units that comprise the relevant population set within organisations as a whole. In more formal terms the 'extension' of the business strategy genus is all those organisations to which a business

strategy can properly be predicated. The question in hand is whether this organisation is one of the set that qualifies as having a ‘business strategy’ rather than some other type of strategy ? Will it necessarily have a predicate feature that can be identified as a business strategy ? As intimated, the borders between business strategy, including the strategies of strategic business units and other types of organisational strategy, are more easily roughly conceptualised than precisely defined. Furthermore, the object of study is not the processes by which business strategies are formulated, implemented and controlled, but the product of that process ~ the business strategy itself with all its contextual idiosyncrasies. This task can be approached by use of indicative distinctions as those outlined above, but like Wittgenstein’s ‘games’, in part, requires in addition a reference to background knowledge to make the pragmatic judgments that prove unavoidable. Our extension then is not that found in a classical classification system of categories each with a defined set of necessary and sufficient conditions to ensure clear cut membership ~ no ambiguity; the entity is either in or out. It is instead what is sometimes referred to as a prototype, or an exemplar, or a ‘fuzzy set’ category; one with blurred boundaries and degrees of membership (Lakoff, 1987; Ragin, 2008; Smithson & Verkuilen, 2006; Taylor, 2003).

‘Organisations with business strategies’ is a categorisation with a graded internal structure (not an either / or one with a single defining feature); and some organisations are more central to the concept while others are on the periphery. So, returning to the analogy of the microscope, the sample we prepare is from a population with fuzzy boundaries and, when examining it, we need to be aware of the pool from which it was drawn and whether we have drawn from the centre of that pool, or from the edge, or if it comprises a full cross-section of degrees of membership. But, when mounted on the slide, there is another question: what is it that we are looking for in the behaviour of these organisations ? If we are seeking to differentiate within this population by the distinctive versions of business strategy ~ to speciate it ~ which particular aspect of behaviour, what attributes and properties are we looking at ? In what distinctive ways can a business strategy present itself ? We must now introduce the second element of our scrutiny of businesses that have strategies – what is termed its ‘intension’.

### 3 THE OBJECT – BUSINESS STRATEGY CLASSIFICATION SCHEMES. PART TWO - INTENSION

#### 3.1. Intension.

To re-cap. If some general property 'X' - like having a business strategy – is projectable to individual cases – only certain types of organisations can have a business strategy - there are two questions to be examined. The first, what kinds of things are 'X' ? or the extension of X. This has been explored at some length above. We now turn to the second question; are there different ways of being 'X' ? This is termed the intension of 'X'. Some kinds of things have a single determining feature that makes it what it is – a gas is either argon or not-argon, never a type of argon. Argon's extension and intension coincide. But a colour or a dog can be one of many different types. We are able to identify, not just graded membership, as discussed above as regards fuzzy boundaries of extension, but also variants of the way the property itself is manifested in different individuals (green, blue, etc; greyhound, spaniel, etc):- a range of intensions. A business strategy genus is a general property (as colour is a general property) but can only be exemplified by a particular choice of business strategy species as to how to compete (just as green is a particular choice of colour). Our main interest is in, and our case studies deal with, attempts to generalise and categorise in a relational structure the options available;- a business strategy classification scheme.

The intension refers to the content of the concept or category. Its meaning. The final research object here is not just the population of organisations that can properly possess a business strategy but is, more importantly, the sub-division or segmentation of the contents of their business strategies into a limited number of discernibly different types of strategy. We are examining generalisations arranged as categories in a relational structure which delineates them as much by relation to others as by the content itself (just as our understanding of green is as much determined by its relationship to blue and yellow as it is to the wavelength of light ~ Lakoff, 1987; Taylor, 2003). This relational structure of speciation of business strategies is evidenced in the frequency with which such classification schemes are presented, not as a set of descriptions, but in the familiar four box quadrant format e.g. Ansoff (1965); Bartlett & Ghoshal, (1987); Porter, 1985.

### 3.2 Perspectives.

To address this, the different characteristics of strategic behaviour need to be examined in what will be characterised as a more ‘perspectival’ approach to the strategy content i.e. intension. All knowledge is created from the perspective of the viewer and concepts and classifications are a means of sorting our perceptions under descriptions. We are now looking at the various species that can be found under the genus of business strategy. However, whilst there are natural mechanisms that give rise to speciation and homogeneity of life forms in the biological realm, each business organisation is *sui generis*, and the homologating tendencies of technology, law, economics and culture (DiMaggio & Powell, 1983; Elder-Vass, 2010; Oliver, 1991) are less procrustean than those of DNA. Put another way, the scope for differences between the individual agents, their command of resources and economic and cultural settings of businesses is greater than the nature / nurture setting for biological similarities. Sticking with the analogy of biology, scientists hold different interpretations of the ontological nature of species. Biologists do not conventionally seek to classify by mode of survival and growth and, when they do, we find that alternative viewpoints can be applied and are appropriate to different questions. It could be by what they eat, (carnivores, herbivores, omnivores); or where they live, (aerial, arboreal, aquatic, etc.). Another key distinction, probably closest to strategy, is that of predator or prey ? and how, (i.e. what strategy is employed), to catch prey or avoid being caught (speed, camouflage, poison, entrapment, etc). The point being illustrated here is that a wide cross-section sample of animals can be interrogated and sorted in different ways according to what question is being asked of the individual animals. This same ‘perspectival question’ applies to business strategy classification.

### 3.3 Business strategy intension offers many facets.

Business strategy is a notoriously multifaceted object (Bakir & Bakir, 2006; Chaffee, 1985). It can be viewed in different ways and the difficulty stems from three main issues. The first is that strategy is abstract rather than tangible ~ a sense of direction that, unless deliberately formulated and expressed, can be hard for other parties to discern, or even the top management team to articulate. It is ‘fuzzy’ in intension (Rittel & Webber 1973), as well as extension, and is often ‘latent’, detectable

only indirectly (Lazarsfeld & Henry, 1968). Some even deny business strategy any ontological ground; as a hyperreal simulacra (Grandy & Mills, 2004) or 'an abstraction with no obvious referent' (Gergen & Whitney 1996). In some instances, businesses will make formal plans and issue public statements as to their intended strategy; to their employees for obvious reasons, or to other stakeholders for other objectives. Such statements tend to contain a strong element of public relations and should be viewed with some suspicion as to true motivation and realism; what is intended for public consumption and true, covert intent can be different, and both can differ from what is brought to fruition (Mintzberg & Waters, 1985). On the other hand there may be no statement or plan, whether overt or covert. Strategy is largely extemporised and is a reaction to external circumstances rather than formal planning, but this may, nevertheless, represent a coherent pattern of organisational responses. The only evidence of strategic behaviour here is past behaviour, and that can be misleading as to the future in a number of ways.

The second issue is that, not only is the abstraction that is strategy hard to focus upon, but there is variety in the position from which the perspective can be taken. There are rival views of how we should construe the core nature of strategy. There is a copious business strategy literature dealing with the problem of defining strategy that recognises it as multifaceted and listing different perspectives thereon. For example, Arnoldo Hax (1990) writes of the six dimensions of strategy; Henry Mintzberg and his co-authors (1998) describe five definitions of strategy and ten schools of thought or perspectives; Richard Whittington (1993) describes four generic approaches to strategy; and one could go on at some length. (Eisenhardt & Zbaracki, 1992 refer to the 'crazy quilt of perspectives'). These examples illustrate the contested nature of the subject matter of (business) strategy and explains the difficulty of situating this work and the discussion of 'perspectives' or 'dimensions'.

The third issue is that there is little consensus as to what we should consider a 'business strategy' to be: what are we looking for? Is it the process of arriving at decisions affecting the long term future growth and prosperity of the organisation? is it the content of the 'strategic plan' (however arrived at or manifested)? is it the sum of the functional plans? is it the contextual reading of what things the organisation should

do in order to grow and prosper ? or to satisfy its stakeholders ? In addition it must be recognised that a business strategy is so intimately contextualised in the organisation's external environment, constrained by its resource endowment and is so dependent upon its unique history that it is seldom articulated in terms that can be generalised. The path dependency and 'bespoke' nature of strategy is such that its vocabulary of discourse is highly context specific, and the field is not effectively professionalised such that appropriate terminology is sanctified by formal or institutional definition.

In this vague and elusive field of business strategy, the management and organisational scientist is hard put to discriminate any properties as strategic elements or indicators identifiable for a single business, let alone to be able to generalise across businesses to create and promulgate a strategy classification scheme for discourse and intersubjective use amongst strategists in different organisations be they businesses or academics (Jarzabkowski & Wilson, 2006). Yet, notwithstanding the above, as pointed out in chapter 1, the ability to intersubjectively discriminate its kinds is a key development if a field of interest is to be a 'science'. Accordingly, certain schemes for strategy classification have been adopted within the community of practice and in formal pedagogy thanks to the contributions of a number of academics and the incorporation of their schemes in research and in teaching. Two of the most familiar and successful schemes are the 'typology' put forward by Miles & Snow (1978) and the 'generic strategies' of Michael Porter (1980, 1985). These, together with the lesser-known comprehensive framework of Henry Mintzberg (1988) form the bedrock of our empirical exploration of this topic in the case studies. However, the ostensible properties of a business strategy, those that determine its classification, are just not definable in the necessary and sufficient conditions expected of a classical, scientific classification scheme. So what we are looking at in the case studies are not inadequate or botched attempts at the task, but bold attempts at the very challenging; there can be no counsel of perfection here.

### 3.4 'Perspectives' versus 'lenses'.

Furthermore, we must now confront the problem of employing near synonyms. As discussed above, there are often incommensurable interpretations of the nature of



strategy that prove genuine obstacles, at times, to full intersubjective communication between those engaged in strategy formulation. But this is not the place to develop that theme. For the rejection of ‘perspective’ or ‘dimension’ and substitution of ‘lens’ and the analogy of the microscope as offered here is intended to break with the presuppositions accompanying associations with such terms in strategy discourse. When describing the viewpoints adopted in this chapter, we are dealing with a more fundamental level of distinction. What is going on when we generalise and categorise abstract social objects ? This is the question explored here, albeit with particular reference to the application of these principles or concepts to the phenomena of strategy.

We are here drawing upon various concepts from different disciplines dealing with the general process of classification of abstract concepts. By and large, that literature does not engage with management and organisational science, nor organisational and management science with that literature. The forthcoming discussion is about the underlying meanings of the terminology deployed when discussing business strategy classification schemes, fundamental concepts which originate in disciplines outside organisational and management science: what philosophy, psychology and linguistics, in particular, offer us by way of conceptual tools for analysing such schemes. Notions that will help us to grasp what is going on when we postulate business strategy classification schemes. So, is business strategy a philosophical concept, a psychological construct, or a linguistic contrivance ? It is all three, and, given its causal powers in human affairs, much more. No wonder it is difficult to bring into focus.

### 3.5 What are we saying here ?

In Chapter One it was established that having a good set of kinds is a fundamental requirement for any progressive science and that, despite the problems, it is worth pursuing the task of finding sound classification systems in social sciences in general and organisation and management science in particular. This chapter has, so far, explored the difficulties of pinning down the concept of business strategy:- of differentiating it from other types of organisational strategy and thus settling its extension; of determining the nature of the types of business strategy that the

classification schemes will try to pin down, the various intensions potentially embraced within that extension; and locating a notion of business strategy classification in a notional hierarchy of ‘genus’ and ‘species’. We have argued that business strategy is ‘fuzzy’ in both extension and intension and that, accordingly, the application of straightforward presumptions of scientific classifications of natural objects by means of definitions of necessary and sufficient conditions are highly problematic. We are here trying to carve out a particular way examining this abstract social object; one that has not hitherto been explored in depth. If pushed to define a business strategy, we adopt as a working definition, the following:-

*‘A business strategy is a local, intersubjectively agreed means by which a business unit achieves coherence and coordination of future activities in seeking fulfilment of its overall objectives in the face of its interpretation of the salient commercial environment.’*

And a definition of a business strategy classification scheme (our object) as:-

*‘A relational structure of conceptual and generalised business strategy categories, or types, asserted, or assumed, to be relevantly defined and arranged for intersubjective use, pertinent to the efficient sorting and consideration of alternative choices of business strategy.’*

In the remaining sections of this chapter, we explicate the various concepts to be deployed in the analysis that will follow in Chapter 3 and in the case studies. These concepts we have assigned to three root disciplines and termed these ‘lenses’ through which the phenomena of business strategy classification schemes will be examined, recognising that there is little that these lenses reveal that is particular to business strategy. These are concepts appropriate to an informed discussion of abstract social objects in general. The three are philosophy, psychology and linguistics.

Note that there is a fairly arbitrary selection of which conceptualisation of classification processes is selected for ascription to whichever of the three disciplines. In large measure they address similar issues from slightly different perspectives. Yet

another instance of fuzzy categories. As far as possible, the notional allocations here are cognisant of the main authors' own departmental allegiances. Of course, go back to earlier centuries and they are all philosophers, for want of recognition of psychology or linguistics as separate disciplines. Whilst on the other hand, there are contemporary linguists and psychologists whose writings about the philosophical underpinnings to their work are of most interest to this enquiry. (We are in enough trouble classifying business strategies, without digressing into the demarcation of the disciplinary ownership of these concepts).

#### 4 THE PHILOSOPHY LENS

This section develops some of the more important concepts and terminology regarding classification in general, building upon Chapter 1.4.'s 'preliminaries'. It then examines in greater depth five important contributions that one can assign to the field:- Wittgenstein on 'language games' and 'family resemblance'; the descriptivist contribution of the analytic philosophers and their realist critics (Kripke and Putnam) on the question of denotation; Hacking's interactive kinds; Millikan's treatment of homogeneity and recognition; Dupré's 'promiscuous realism'; and Boyd's 'accommodation thesis'.

##### 4.1 Essentialism.

Essentialism can be traced back to the ancient Greeks. It is the belief that what makes an entity or phenomena a type of something, what makes it belong in a category, is the possession of some inherent characteristic 'essence' common to all members of that category. By this account similarity amongst things and phenomena is not accidental, but caused by some essential component of being. This essence, whatever form it takes, is the necessary and sufficient condition for membership of a category. Kinds are given to us by natural powers or human agency or social structures or some other causal force, that would be operative in the absence of human knowledge that such exist, i.e. that things naturally belong to appropriate categories is not dependent upon our recognition that this is so. Essentialism is, thus, associated with a realist worldview. It provides a stable ontological basis of kindhood that a visitor from Venus would also recognise as operative and useful. It is up to us in our scientific activities to

discover and categorise what is ‘out there’ in the natural or social realm. Science, including social science, progresses most when it is sure of the ontological basis of its categories.

A purist essentialism would posit only a kindhood that is eternal and invariable, (more or less), such as might apply to electrons or stable chemical elements. This belief poses few problems in relation to some natural kinds – argon, with its characteristic, or essential, atomic structure would exist in the atmosphere as a gas whether or not we had discovered it there. Venus was a planet aeons before mankind had named it and discovered its planetary motion. When it comes to biological kinds a strict requirement for immutable essences is more difficult to sustain, (Boyd, 1999b; Dupré, 2002). The positing of impersonal, mind-independent ‘essences’ of artefacts or social kinds such as armchair or architect is vastly more challenging. Artefactual, social or institutional kinds cannot aspire to the natural essences of elements or planetary status. The concept of an eternal and invariable essence has to give way to a more contingent, contextualised essence, but, even here, some form of ‘social essentialism’ is tenable where there are ideals or prototypical armchairs or architects as tenable notions of some irreducible essential properties of ‘armchairness’ or being an ‘architect’ means being registered as such.

It will be suggested in the next chapter, that an abstract social kind can be taken under the umbrella belief in essences as ‘motivated’ by some teleological purpose, be that the unaided nature of human agency and institutional structures, or the will of God, or the natural way of things. That is to say that the homogeneities we note in social objects, be they tangible or intangible phenomena, are the product of forces that brought them into being and shaped their way of being. Organisations as a whole are produced and shaped by a varied range of non-trivial forces. Hence the concern to define with care those organisations of which a business strategy can be appropriately predicated. For here, at least, a set of forces loosely described as market regulation and competition might be claimed as causal in creating meaningful, generalised, cross-sectoral categories of business strategies. Further, it is suggested below under ‘psychological essentialism’, that there is powerful predisposition amongst humans from childhood to assume that our categories and kinds are the result of possessing some unknown, inherent essence. It is hard to erase any trace of essentialism from our consideration of categories.

#### 4.2 Nominalism.

The alternative, polar extreme, is the belief that the separation of entities and phenomena into categories is entirely arbitrary and subjective. It is the work of human projects such as science and communal convenience such as language, and this can vary over time, space and culture. Individuals are all that exist, but we can find similarities among them and it serves our purposes to combine them into categories in cognition and discourse. Similarity here lies in the conceptions of the observer, but a culture or scientific community shares notions and terminology for intersubjective exchanges. As such, a kind or category can be said to exist in the collective mind. This is ‘nominalism’ and can be traced back to the Middle Ages, (Hacking, 2002(a)) but was articulated in more modern form in John Locke’s *Essay concerning human understanding* (1690). Locke viewed it as the task of science to reveal any essences that underlie similarities, but since contemporary efforts had not provided convincing results, all that was available were nominalist categories. Locke’s version of nominalism has resonated down the centuries (Uzgalis, 2002). In more contemporary guise, there can be two nominalist positions:-

(a) The broadly ‘social constructionist’ view that the categories marked out by a society in general, or by a specialist community of practice, are consensually and communally held. They are reasonably stable intersubjective kinds, predicable of both natural and social phenomena. Such a position would construe institutional kinds (concrete or abstract) as being epistemically objective, because it is a presupposition of such kinds that they have been assigned their status by society at large, i.e. are externally determined and determinable for the individual agent. They are socially constructed givens of social life. They are, however, ontologically subjective in that things might have been determined differently by another society or community of practice, or that consensus may break down and an alternative disposition of kinds substituted (Searle, 1995, 1999; Hacking, 1997).

(b) The broadly ‘postmodernist’ or ‘poststructuralist’ view that all categorization is either i) personal and variable at will ~ the Humpty Dumpty position in *Alice*

*in Wonderland: Through the Looking Glass* ;~ ‘words mean what I want them to mean’; or ii) is the product of some ideological imposition that the individual is free to reject in an emancipatory effort. Such categories are construed as subjective at both epistemic and ontic level. (Belsey, 2002).

Both of the postmodern positions above have given rise to copious literature, especially in regard to the sociology of scientific knowledge post-Kuhn, and ‘emancipatory’ studies of gender, race, sexuality, and the like. This literature would reject any serious consideration of business strategy classifications as being anything more than making sense of a shopping list (Fleetwood, 2005). It is not explored further here.

Whilst it is possible to discount the presence of any ‘essence’ in some social phenomena such as the arbitrary categories used to determine market segments for breakfast cereals, or ‘drive time’ to define a supermarket’s catchment, it is hard to discount some element of essence in most social categorisations. If a social category appears meaningful to us, we intuit it to be more than an empty label. However, as Hacking (1999) points out, in the social realm it is possible for the labelling to have social consequences, whilst argon and Venus are indifferent to our labelling.

The position to be adopted in Chapter 3 is one of pluralism. It accepts the importance of kinds rooted in social ontology to any ‘science’ of strategy, but also acknowledges the utility of some purely nominal categories for managerial and organisational practices.

#### 4.3 Bone fide v fiat boundaries (Sortals)

It follows from a strict essentialism that memberships of categories are determined by defining necessary and sufficient properties as *sine qua nons* of qualification for that kindhood; say atomic number of 18 for argon, but, currently, posing definitional problems for a ‘planet’; albeit the large spheroid in orbit second from our sun, and designated by us Venus, is clearly one of them. Thus, we can characterise a sound essentialist boundary-setting as given by the nature of whatever is being segmented and categorised. Such an extension is a ‘*bone fide*’ reflection of the

material or phenomena in question. The phrase that encapsulates this is ‘cutting nature at its joints’. On the other hand, there are many instances, particularly in the social realm, where no boundaries are ‘given’ by nature. There are no natural joints. Here we use what are termed ‘fiat’ boundaries; these are boundaries set somewhat arbitrarily by us in order to make the multiplicity and variety of experiences more tractable to our purposes. This is a nominalist approach to extension. It enables us to collect individuals into categories such that the subject of a discourse can be intersubjectively interpreted or the object of an enquiry reducible to data for analysis in the same way that atomic weights give us the ordering of the elements in the periodic table. From some postmodernist / poststructuralist positions, all socially salient boundaries are fiat boundaries.

However, as indicated above, the necessary and sufficient conditions for planethood are both given by astrophysics and human convention. Or, put another way, we have set definitions that reflect our knowledge of astrophysical phenomena, but selected them in a way that suits our purposes. Further, the exposition of the extension of ‘business strategy’ as given in Section 3 above is little more than a grounded account of how it is regarded for the purposes of this treatment. We will return to this notion of a ‘grounded account’ later (see Boyd section 4.10); but for now the point to register is that boundaries, especially in the social world, are seldom clear cut, nor entirely fuzzy, such that there is no telling what is included or excluded. There are elements of essentialism and nominalism at work. Characteristic of an essentialist / nominalist tension in boundary-setting is that of the feminist position seeking to throw off the social constructions of gendered roles in society, whilst recognising that certain physical attributes are grounded in natural kinds. For our purposes the term ‘sortal’ is used to indicate the distinguishing characteristic(s) upon which extension is fixed, recognising that the nature of sortals can vary on a spectrum from strict essentialism to pure nominalism. That, however, raises a further question ~ what makes for a ‘good’ sortal ?

#### 4.4 What makes a ‘good’ sortal ?

This question is one that lies at the heart of the detailed considerations of the case studies of business strategy classification schemes. Good kinds make for good science and good sortals (along with clear intensions) make for good kinds. An

essentialist view is that nature has discontinuities and the properties of these divisions are natural sortals. Originally, such sortals were attribute-based partitioning or classification criteria derived from naturally manifest properties. However, as scientific methods of closed experiment and the artificial enhancement of our powers of perception via microscopes, spectrometers, magnetic nucleic resonance, etc and mathematical techniques such as Fourier transforms and the like, the nature of our understanding and sorting changed to define, on occasion, according to conceptual rather than (directly) perceptual properties. Furthermore, it must be acknowledged that kinds as found in nature are seldom of the pure sort found in the laboratory; the natural world is also composed of isotopes, hybrids, crosses and the like. Argon's atomic number 18 is an artefact. Even the apparently simple question found in a drop down box of the standard form provides just two choices 'Male' or 'Female', when it took over nine months of (scientific) argument to answer that question for the athlete Caster Semenya.

When we move to the social realm the scientific methods referred to above are not available to us and the social phenomena we seek to categorise are contingent and transient products of human agency, social structures and history. The categories we impose thereon are the product of our interests, and often those interests are best served when our categories are grounded in underlying real circumstances (Boyd, 1999b; 2010). Social categories are observer-shaped and -relative and are conditioned by our projects. Sortals tend to be either arbitrary (Married/Single; 6'0" – 6'3"; SE7 post code) or vague (rich / poor; tall / short; inner city / suburbs). Making our sortals precise, when the phenomena just do not fit with precision, or making them vague when our interests and projects are certain, just will not avoid the inescapable conclusion that sortals are generally much harder to fix in the social sciences. A point that is under-theorised in much of the literature, but is very evident in the contested nature of much social categorisation ~ not just gender and race, but also, for example, 'disabled', 'under-privileged', 'terrorist', etc. However, this is not a counsel of despair, for let us admit that, far from ideal they may be, nevertheless these arbitrary or vague delineations of category edges are a necessary part of helping in our sortings and understandings, provided that their limitations are fully acknowledged and accepted.

Good sortals, in the sense of ideals, are unambiguous, enduring and universal.



They make distinctions or divisions which provide meaningful categories. Categories that enable us to draw useful deductive, inductive and sense-making (abductive) conclusions from certain knowledge of the categories concerned. If we can make sound inferences about natural and social phenomena and events from knowing into which category they fall, then our categories, objectively determined or arbitrary, precise or vague, hold value. Eco (2000) considers the world as a continuum, itself unsegmented, but this unsegmented world has a 'grain', and our segmentation works better with the grain than against it. If we construe the social world as consequent to social forces, we can assume some granularity in social phenomena and construe the work of the social scientist as seeking out how to work with the grain.

#### 4.5 Wittgenstein's language game and family resemblance.

Ludwig Wittgenstein's later work, *Philosophical Investigations*, published posthumously in 1953, is considered by some (Lakoff, 1987) to mark the end of the 'classical approach' to categories where, despite differences of some considerable importance (as described above), the general presumption was that our kinds (however conceived) had clear boundaries and common defining properties. Wittgenstein challenged this very structure. He moved our thinking about categories from reflecting the way the world is, towards the world reflecting back to us the way our categories (of thought and speech) are imposed upon it.

Wittgenstein rejected the reduction of language to simple representation. To him any thought is a sentence and a sentence is a picture of the fact it represents. Our systems of concepts form the frame in which our words paint the picture of the world. The meaning of a particular word is given by its use, but we must recognise the diversity of uses to which words and language can be put. Life, for humanity, is a 'language game' that only humans can play and the meaning of language depended upon the use to which it was put. (Biletzki & Matar, 2009). Thus, the meaning of our concepts is best understood through examining their use, rather than through a dictionary or logic. We will grasp the meaning of specialist knowledge by examining the experts' deployment of their terms. Conversely, if we don't follow the embodied and social meanings of language, we cannot communicate and the acquisition of advanced realms of knowledge is impossible (Collins & Evans, 2007). The properties of

certain categories are as a consequence of the nature of our biological make up and the experience of functioning in a social environment. (See Section 5 Linguistics below).

The understanding that it is possible to have a satisfactory, workable concept without having sharp defining criteria is Wittgenstein's prime contribution to our area of interest. His rejection of the philosopher's 'craving for generality', as exemplified in the search for essences, might be considered as bringing a proto-postmodern perspective to our understanding of kinds. Boundaries claimed Wittgenstein are extendable and permeable. Recognition is possible without prescription. The example he uses here is that of the concept of a 'game'; almost impossible to define, yet easy to grasp and use in normal discourse. We have an innate ability to recognise that is not reducible to a defining set of rules for identification (see also Millikan, 4.7 below). Not all sortals are sharply defined ridges in the topography of thought, some are ill-defined waterways that drain the marshes of the mind. This idea is reflected in his notion of 'family resemblance' as a way to create a class. In an extended family, two distant members may have very little in common, but will share some characteristics with other closer relatives, such that the intermediate ground can be filled and the broad family discerned. In this manner we might be able to link, say, soccer to darts to bridge to sudoku within the 'game' family.

Clearly in postulating family resemblance as a means of dealing with similarities among individuals, Wittgenstein is suggesting that the notion of essences is inessential, at least in some classification schemes. Boersema speculates on Wittgenstein's position by pointing out that it is not antithetical with the concept of a natural kind, or even of essences as an epistemological question:- 'one might say that so far as we know a given kind has no essence, but maybe we just haven't found it yet.' (Boersema, 2009, p182). By allowing a spectrum of category participation, Wittgenstein also challenged the notion that, since all category members are defined by a shared character, no individual member should be more central than any other. Yet this is denied in our daily discourse. In our usage we recognise that some examples are better choices as exemplars than others. He cites the case of 'dice' as being a 'game' but rather less central than other games to our notions of what being a game comprises. This too is picked up by later theorists such as J L Austin, Lofti Zadeh's 'fuzzy sets' and in Eleanor Rosch's 'prototype' theory. (See section 5.2, Lakoff et al, below).

A second major salient theme of Wittgenstein's work is the recognition of the collective, communal nature of language and kinds. He held that there could be no such thing as a private language. Although there is significant controversy about different interpretations of his text, it appears that Wittgenstein was committed to the view that language is essentially social (Candish & Wrisley, 2008). This stems from his belief that the use of language is made possible by the human 'form of life' and his use of the term 'grammar' to describe the workings of this public, socially governed 'language game'. To quote Boersema:-

'Words, like Wittgenstein said, are tools, but they should be thought of as less of a screwdriver and more like a steamship; they are tools that we use, certainly, but they are ones that require collective, cooperative use.'  
Boersema, 2009, p 94.

The social embeddedness of our terminology in a form of life is also part of what Harré (2002a) refers to as the 'conceptual presuppositions' that create the background to all thoughts, feelings and actions. Such preconceptions are a) shared; b) play a role in shaping what we experience; and c) maintain local standards of correctness. The shared background of normative expectations and anticipations provide us with the standards or criteria by which we judge the meanings and values of others. Relating Wittgenstein's insights to the process of management, Shotter remarks; 'For if Wittgenstein is right, meanings are not hidden in people's heads, but occur out in the ceaseless flow of living, language-interwoven relations between ourselves and the others and otherness around us' - Shotter 2005, p130.

#### 4.6 Denoting - Descriptivism and its critics (Kripke and Putnam).

In the first half of the twentieth century developments in analytical philosophy included a focus upon the meaning of terms and had major implications for the whole sphere of language and denotation. In brief, the school of thought that resulted ~ labelled 'descriptivism' ~ examined the relationships between;- the referring term and the object or individual referred to thereby; the reference and the meaning of the term; and the relation between reference and the associated truth conditions (Reimer, 2009).

As regards the proper name of an individual – David Cameron – the reference between the name and its object is held in the descriptive content associated by the speaker with that name. It may be ‘our Prime Minister’ or ‘my husband’ or ‘my party leader’ etc, depending upon the speaker’s relationship with the individual referred to. The theory was extended to cover the extension of general nouns and substance concepts where a description, or cluster of descriptions, uniquely identify the object. According to this view meaning was the ‘description’ held in the ‘mind’. As we learn language, so we learn meanings as dictionary entries in a private lexicon describing their referents in the world.

Although Saul Kripke (1980) and Hilary Putnam (1975) differ in detail, the bracketing of their thinking on reference and classification is warranted by the overall similarities in their rejection of an inherent nominalism in ‘descriptivism’. Ben-Yami (2001), Millikan (2000) and Reimer (2009) all bracket Kripke and Putnam as being ‘anti-descriptivist’. However, their position is not simply a positivist / essentialist rejection of nominalism, for it also entailed a rejection of the denial of social dimensions to cognition and reference that had been associated with essentialism.

A proper name is not, according to Kripke, a description that falls within a classification, but an identifier; it points to the phenomenon in the world that is its referent. Thus, had Pablo Picasso died at the age of three none of the descriptions we now associate with the name would apply, yet he would still have been Pablo Picasso. Names are what Kripke called ‘rigid descriptors’ – they refer to the same designated object in every possible world (i.e. outcome of events) in which that object exists or existed (Cumming, 2009; LaPorte, 2006). The descriptivists had argued that the sense of a term determined its reference, so that two words with the same sense must refer to the same thing. But Kripke pointed out that we can have *a posteriori* necessities; facts that are necessarily true, though they can be known only through subsequent empirical investigation. For example the ancients identified two stars ‘Hesperus’ (the Evening Star) and ‘Phosphorus’ (the Morning Star), that were subsequently demonstrated to be separate sightings of the planet Venus. Gold, once defined as a metal of particular properties, is now defined as that element with atomic weight 79. There is, thus, compelling demonstration that the object and its referent are not determined by our

descriptions, but by the external object itself. The object out there is stable, it is we who revise the description in the light of new knowledge.

Putnam's theory of 'semantic externalism', as exemplified in his well-known 'twin earth' thought experiment, similarly sought to demonstrate that reference was to external criteria, not merely internally held descriptions. Putnam, in particular, rejected the descriptivists' position that meanings of our words can vary over time according to information acquisition. To him, the designated object did not change, only our ideas thereon. His classic claim being 'Cut the pie any way you like, "meanings" just ain't in the *head*'. (Putnam, 1975, p 227). Thus, for Putnam, the reference of a term such as 'elm' or 'beech' are extant in nature and natural kind terms do not work by being associated with a set of properties given in their definitions, but simply by pointing to what is out there. This he termed the indexicality of reference. Putnam emphasised the importance of stereotypes and what he termed 'paradigms' – exemplars, samples, tokens - in establishing ostensive reference. However, the external realism that Putnam espoused allowed for the creation of natural kinds by virtue of possession of a common inner nature of some sort, - atomic structure, genetic code, or whatever - and from which the observable properties follow. Hence Kripke, Putnam and their followers can be seen as rejecting nominalism and promoting a return to essentialism in a new social incarnation.

Albeit referred to in the literature, as the 'Kripke Putnam Theory' (KPT), as summarised above, it is nowhere directly attributable to either author, and in various guises, and in different respects, is critiqued as much as accepted by contemporary writers on kindhood. Indeed Millikan criticises their work as pointing out what was wrong with descriptivism as a doctrine without substituting a coherent alternative of their own. In fact she refers to their work as tending to 'collapse into more complicated descriptionist views' (Millikan, 2000, p 49). Thus, the overall picture may be that the KPT was a contribution to the erudite argument within analytical philosophy that is more of historical and polemical significance than practical consequence for discussion of kinds. The KPT marked a turning point rather than a final destination. Indeed, it must also be noted that both are still alive and have contributed further elaboration of their views as the years have passed.

However, a formulation by Putnam of how the layperson acquires an understanding of phenomena from specialist discourse, is of interest to later sections. This is his notion of the ‘linguistic division of labour’; that as science progresses the discoveries and understandings at micro and macro level are beyond human sensibilities and the grasp of many. The meanings of some terms e.g. ‘quark’ or ‘quantitative easing’, are held by a subset of specialists on behalf of the community in general and these terms can be employed sensibly by lay persons only by relying on publicly held meanings. This returns him closer to a descriptionist point of view, at least as regards such terms.

#### 4.7 Millikan;- substance; similarity; classification; and ‘ontological grounds’.

Ruth Garrett Millikan’s engagement with kinds is driven by her interest in philosophy of mind, language, ontology and human cognitive processes. In particular, the thesis of her book *‘On clear and confused ideas’* (OCCI, 2000) is that human cognition’s central task is that of ‘reidentification’ of ‘substances’. Both terms require elaboration. First, to her, a substance is an empirical concept and embraces almost anything that retains its properties from encounter to encounter. This is a very wide definition. It includes ‘individuals’ such as the river Thames, or Buckingham Palace, or Arsenal FC. And it covers the whole panoply of things we can group and classify; what she terms ‘real kinds’. Thus, natural kinds such as argon are obvious candidates, but so are what she terms ‘historical kinds’, such as biological entities (a mouse is a mouse because it is born of a mouse) and her ‘functional kinds’ which can be artefacts such as a Phillips screwdriver or Romanesque church, or social and abstract kinds, such as a retail chain (Tesco) or ‘the no 13 bus’ (both concrete and abstract) or ‘dentists’ – where she terms the category ‘an actual-world group’ that can be empirically researched and meaningfully referred to as in ‘9 out of 10 dentists recommend....’. She even extends the notion of substance to Beethoven’s Fifth Symphony which will sound pretty much the same next time you hear it or *‘The Little Match Girl’* who will freeze to death at each re-telling. Thus, a substance is anything that will provide a similar set of stimuli on the next encounter and, to this extent, Millikan is enunciating her own version of ‘meaning externalism’ and applying it to a range of things that would include social institutions and abstractions.

‘Reidentification’ (her word for what one might equally term ‘recognition’, with the emphasis on re-cognition) is identifying on a second or subsequent encounter with a substance the characteristics of similarity that indicate the individual as the same, or the class member as of the same type, as has previously been encountered. This even where the circumstances of that encounter are not identical. The extension of a substance concept is, thus, external to the person noting the similarity. It is grounded in nature or society rather than our disposition or capacity to recognise it. It is recognition via similarity. However, one must be able to identify too, and distinguish between, those characteristics which are enduring features of the substance and those which are transient; that do not carry over from one encounter to another. Between, say, baldness and wearing a tie; between the snow-covered car and the one normally found in my drive. Here Millikan makes use of the notion of a ‘substance template’ by which she means the knowledge of what kind of things can be learnt about a substance and this includes the sort of things which carry over from one encounter to the next. And, finally, she distinguishes between the ‘concept’ of a substance and a ‘conception’ of that substance, in that our concept is the reference point and the conception is the full entry in our personal directory of knowledge.

Albeit our interest is in classification (which assumes repetition or duplication in types) rather than reidentification (which accepts individuals too), Millikan goes a long way to explaining what constitutes the act of classifying. She takes some trouble to distinguish classifying from identifying since, though intertwined, they serve different cognitive tasks. To classify one needs to know the relevant properties of the substance and the purpose is storage, retrieval or transfer. To (re)identify is to act upon incoming information in order to come to know its relevant properties and to make subsequent inferences via a substance concept that is univocal, stable and nonredundant. First (re)identify, then one may classify. It can’t be done the other way round. What is more, the substance concept will, in most cases, come within some substance template(s) which both designate(s) properties and indicate(s) what further properties may meaningfully be obtained. (Her terminology for what others have referred to as ‘falling under a description’ – see 5.1 below). Some of these properties may be used for classification purposes in the diagnosis of a substance – a predicate found for a definite subject that can be stored in a particular mental index. But she firmly rejects the idea that a kind is simply a definition of properties.

There is equally an entwined relationship between all this (i.e. substance concepts and classifying) and language, since it must be recognised that spoken and written words form an important input to the cognitive system and that the acquisition of language provides an additional and powerful ability to capture new substance concepts. She argues that language is just another form of sensory input like vision. ‘Learning a language is, in part, just learning more ways to pick up information through the senses and put it away in the right boxes’. (OCCI, 2000, p88-89). But, importantly, language provides a unique means of acquiring a substance concept where there are, for the majority of us, no other relevant sensory inputs; e.g. our concept of Aristotle, or an electron. She writes ‘Words serve in huge numbers as seed crystals around which fuller conceptions of substances are then quickly formed.’ (OCCI, 2000, p 91). This would include words that serve as class labels and, provided there is a grasp of the relevant substance template and enough relevant grammar, the concept may be fleshed out over time. The existence of an accepted class label in our public language does not, however, require that we associate that label with exactly the same properties as others in the same language community. A flexible and personal designation as opposed to the rigid designation of the dictionary entry.

Of particular interest is the central role that Millikan’s 2000 book attaches to inferences that can be drawn from the substance concepts, templates and tracking. Here she is dismissive of classes that are not founded upon some reason. As regards what others term ‘essences’, Millikan uses the words ‘ontological grounds’ where the cause of sameness in real kinds is grounded in natural necessity, including (one assumes) homeostasis that results from social structures and forces. ‘The very first function of a..... cognitive representation is to be ready to participate in inferences.’ (OCCI, 2000, p202). Her ‘real kinds’ are real because there is good reason for the similarities. She points out that it is substances, rather than classes, that are of interest to science. But there are many other classes of things brought together by us, but lacking such ontological grounds, and these she describes as being ‘mere classes’. This, however, is discussed further in Chapter 3 below, for which Millikan has proved a rich source.

#### 4.8 Hacking and social (interactive) kinds.



The philosopher of science Ian Hacking's writings (1991a, 1993, 1999, 2002a, 2002b) approach the question of kindhood very much from a sociological perspective, albeit the jumping off point is the tradition of natural kinds (1991). The key distinction that Hacking (1999) draws is between 'indifferent kinds' – those that are unaffected by the labels we attach to them – and 'interactive kinds' where there is a potential for consequences to follow from consciousness of the labelling. Consequences which Hacking terms 'looping effects'; meaning a reflexivity between the attribution of a classification and the individual or group so classified. Whilst these two terms are close at the indifferent kinds end to what includes, *inter alia*, 'natural kinds', the distinction regarding his interactive kinds, is more exclusively drawn. First, many of the kinds that one would associate with social, rather than natural, originations and distinctions – that between, say, breakfast and lunch or the seven of spades and Jack of hearts or coin of the Realm and metal disc – are not 'interactive' with their classifications because they are insentient to them. On the other hand, classifications of certain social properties such as social status, gender roles or educational attainment not only provide distinctions, but these are actively made and re-made over settings and time in such a manner as to influence (deliberately or inadvertently) those so categorized or categorizing to respond to, or aspire to, or avoid, etc., the social classifications so provided. These are Hacking's 'interactive kinds'. Thus, he writes about 'madness' or 'child abuse' as being of interest both as socially created categories (which he traces as historico-spatio entities), and as classifications that interact with those entangled therein. See also Bowker & Star, (1999) and Hsu et al (2010) on social classification schemes and their consequences. A distinction that is of importance to our enquiry, since strategy classifications when communicated to individuals within firms about their own organization or about another firm can influence subsequent behaviour – business strategy classifications fall within the Hacking category of interactive kinds.

It is possible to regard all classifications recognized by or introduced to society as being social constructions and some of the sociology of science literature would advance the theory that all that passes for scientific knowledge is a social construct. (This is nominalism in a social constructionist guise, which, one supposes, is the foundation of all modern nominalism, albeit the nominalism of, say, Locke and John Stuart Mill arose prior to what is today called social constructionism). However,

Hacking is only partly within the broadly social constructionist camp, and is prepared to concede the existence of natural kinds alongside kinds that are contingent upon historical and social processes. He is, however, less clear on the distinction of where that divide lies, perhaps because he sees no clear cut distinguishing criteria. Between Hacking's narrowly defined socially constructed 'interactive kinds' and 'natural kinds' of the traditional type, lie a range of artifactual, biolooping or other types of kind, all within the realm of 'indifferent kinds'. Hacking's well-known paper of 1991 'A tradition of natural kinds', argues that social kinds do not qualify as natural kinds and, moreover, that natural kinds are a (by implication, tiny) proportion of kinds useful to mankind (he is inclined to use Nelson Goodman's term 'relevant kinds' to embrace the latter – Goodman, 1975). He points out that all kinds of which we are aware are, *ipso facto*, socially situated and notes approvingly George Lakoff's contribution as described below (See 5.2). This leaves Hacking as a fairly uncommitted adherent to any essentialism as regards kindhood, but acknowledging the possibility of an ontological basis to some categorisations.

It is also important to acknowledge the connection made within this thesis between Hacking's narrative of the social construction of certain social kinds, such as 'anorexic' or 'abused child' and the coverage of the fads and fashions of management and organisational science, where it seems concepts such as 'defender' or 'cost leader' may be subject to similar social constructionist forces (see the subsequent discussion of the individual business strategy classifications). A connection that, otherwise, appears to be little recognised within the existing strategy or management fashion literature.

#### 4.9 Dupré's pluralism.

The main sources for this section are John Dupré's books *The disorder of things*, 1993 and *Humans and other animals*, 2002. Albeit a philosophy chair, his main perspective upon the question of kindhood is from that of the biological sciences. He explores in particular the paradox that whilst 'species' is a paradigmatic classification concept for the lay person, professional biologists are deeply divided over an appropriate universal basis for classification (see 2.5 above). Conventionally,

classification is based upon the differentiation of species and the modern concept of species entails evolutionary processes. However, there are both theoretical and practical problems for the professional biologist seeking a classification system based upon the teleological purpose of genetic variation and natural selection leading to superior survival for the 'fittest'. If evolutionary theory is accepted there cannot be clear demarcation lines between species. And even the conventional differentiation of species based upon unique reproductive groups is found wanting in practice.

Having somewhat undermined all theory-based approaches to biological classification, Dupré is highly pragmatic in his approach to the subject – let not the best be enemy to the good. He is prepared to sacrifice purity of principle for adequacy for purpose and ends up with a contextual perspective of classification for purpose (not by purpose or cause), that he terms 'promiscuous plurality.' The claim is that there are multiple legitimate strategies for representing nature and no ideal representation that is sufficient for all explanatory purposes. The reduction of nature to molecular biology, is rejected in favour of a layered structure of autonomous explanations. Dupré acknowledges the fact that the Linnaean system is established in the fields of horticulture, birdwatching, plant and stock husbandry, gardening, environmental science, etc., and concludes that, since there is no unquestionably correct alternative classification, we should stick with it. If we then require a rigorously grounded classification in relation to a particular enquiry or application, we should select that which best matches the context. Dupré, thus, is arguing for a highly pragmatic and pluralistic notion of kindhood.

This pragmatism means that Dupré is also willing to explore in greater depth the expectations that we hold of kind terms. He provides a critique of the traditional notions of natural kinds that highlights the assumed nomological properties of such kinds. Members of a traditional natural kind are held to operate within a set of natural or scientific laws that govern things of such a kind and, thus, behaviour and properties can be inferred from the abstract kind to the particular individual member. Such views, argues Dupré, are incompatible with contemporary beliefs that laws are probabilistic

and the product of heuristic models rather than universal determinism. To Dupré ‘concepts’ (see 4.7 above) rather than kinds may seem more appropriate:-

‘we should think in terms of concepts rather than kinds. It is just that the application of important theoretical concepts will, among other things, serve to sort individuals into groups. The construction of models will typically involve distinguishing between the roles of members of these groups. Concepts, in short, classify things, and it is with views of classification that I am here concerned.....The fact that there are objectively correct ways of classifying organisms for particular purposes of enquiry, but that these classifications vary from one enquiry to the next, should lead us to prefer the weaker conception of natural kinds that I have suggested.’ (Dupré, 2002, p 108-9)

This view is Dupré’s ‘promiscuous realism’ about joints or ‘the grain’ in nature providing us with potential sortals, but how we sort entities as being a matter of human discretion. This contrasts with an essentialist interpretation that ‘naturalness’ carries with it a feature of exclusivity – the belief that where there are natural joints there can be just one set thereof and that this is independent of any ‘interests’ on the part of the classifier(s). A viewpoint Dupré strongly resists.

#### 4.10 Boyd’s accommodation thesis and HPC kinds.

The tension between the intransitive causal structures of natural or social reality and the epistemic, transitive constitution of our categorisation schemes is reconciled in Richard Boyd’s account of classification practices as being successful when grounded in reality: his “accommodation thesis” (1991, 1999(a), 1999(b), 2010). In short, Boyd’s conception is that all sciences are inescapably social endeavours which function at their best when supported by the ontology of the objects of their enquiries. ‘What is to be explained is the ways in which the accommodation of classificatory and linguistic practices to causal factors in the world contributes to the reliability of those practices’ (Boyd, 2010, p 214). To Boyd a folksonomy or a scientific classificatory scheme found in intersubjective use ~ within what he terms a ‘disciplinary matrix’ ~ is an everyday or

specialist lexicon that attempts to cast a net of explanatory and inferential concepts over the ontology of its central entities – be they trees of the rain forest or enzymes or internet service providers. How far that endeavour succeeds will depend both on the conformity of that net to the underlying intractable reality it targets and the utility of the practices within the disciplinary matrix concerned. Good kinds reflect a harmony between ontology and epistemology. An analogy of epistemic and ontic conformity in language is like that of an overcoat thrown over a chair and reflecting the underlying structure. Extending the analogy, a highly useful or successful classification scheme, such as the Periodic table, would represent a set of fitted covers.

Whilst other philosophers have approached the issues of the relation between the world and reference by asking how is it that we are able to refer to real things, Boyd reverses the direction by asking how is it that our references equip us to deal with the real world. In this he reflects the same question as that posed by the critical realists – what must reality be like for this human construal thereof to be of practical value ? (see Bhaskar, 1979; Lawson, 1997, 2003). He is, thus, concerned with the conceptual and linguistic practices of the sciences and, albeit, somewhat focused upon natural science, his approach is (he argues) appropriate to the social sciences. In anticipation of the case studies, the categories postulated by Miles and Snow or by Porter seek to provide projectable kind terms for real world organisational strategic behaviour that enables such terms to offer sensible explanations and to be fruitfully used in inferential thinking. In Boyd's terms, neither would be seen as proposing a methodology for detecting kinds so much as suggesting a way of using their categories for the task of strategising.

Boyd is a realist about kinds, accepting that some natural kinds of the traditional sort may exist, but also proposes that quasi-natural kinds be recognised as possibly lacking any definitive essence, but nevertheless representing stable sets of attributes shaped by the causal structures of the world, including the social world. If a central problem with essentialism is that of fuzzy extensions (Wittgenstein, Rosch), then Boyd's 'homeostatic property clusters' or 'HPC kinds' offer an alternative conceptualisation. An HPC kind is the result of the existence of some set of causal factors in the world that bring about a relatively enduring clustering of the attributes of some entity about which inductive

generalisations are reliable. These HPC kinds can be intransitive objects of our enquiries, just as much as a traditional natural kind, albeit the composition and qualities of the attributes may be somewhat variable between different tokens of the kind. For Boyd, species can be claimed as HPC kinds, but he extends the argument (more by inference than detail) to social kinds, such as race and intelligence.

Other philosophers (e.g. Hacking, 1991b; Millikan, 1999) have taken issue with aspects of Boyd's thesis and his work is little known in social science (see Engelskirchen 2011 for exception), let alone management and organisational science. However, it does offer in HPC kinds and accommodation theory two very useful notions for deployment in puzzling the very nature of the case studies of business strategy classification schemes.

#### 4.11 Where does the 'philosophy lens' get us ? Summary of main points.

The initial focus in this section has been upon the establishment of what is termed the traditional or classical view of 'natural kinds' as categories determined by robust definitions giving necessary and sufficient conditions of category membership based upon knowledge of essential characteristics given by the inherent properties of the external reality being classified. Intensions are given by essences and extension by clear-cut sortals. By tacit analogy, social kinds are expected to follow the same prescription. From this has developed a 'scientific' representation of classification schemes of all sorts as *per genus et differentiae*, giving a 'natural' hierarchical structure to such schemes. This tradition is still very much alive today, largely in a positivist orientation of a world-to-mind nature, in which the social sciences, as much as the natural sciences, conceive of their material. As will be seen later, in relation to the case studies of business strategy classification schemes and research thereon, this conception of their material is prevalent amongst many organisational and management scientists as a presupposition about their material.

However, starting from John Locke, an alternative interpretation has gradually been refined that holds that our categorisations and our schemes of classification seldom

conform to such traditional expectations. This especially so in the social sciences, where a total rejection of any objective ontological basis to our classifications sometimes characterises approaches and attitudes. Under this view, our categories are creations of the mind, malleable to our purposes. Classifications are imposed by us upon nature in a relativist, mind-to-world direction. The similarities that we note are coincidences of structured cognitions which have been shaped by language / concept acquisition in socialisation. The, post-modern, often ‘emancipatory’, literature here is very copious. It has not been developed above since it offers little to this thesis.

Instead, this section has identified a number of important philosophers who have rejected this relativist nominalism, yet without recourse to classical theory. Whilst equivocal about essences in the traditional sense, they all attend and attest to the ontology of at least some of our kinds. Philosophers who, to varying degrees, acknowledge the social nature of classification systems, yet ascribe some ontological basis to at least some of our categories. In various ways, all endorse a mind-meets-world position. In particular, the following points of view, some of which contain mutual contradictions, have been explicated above:-

- (i) The boundaries of categories are seldom as clear-cut as implied by the traditional view. In fact, many robust and perfectly serviceable categorisations are, nevertheless, fuzzy in their intensions and extensions and some members are more central or typical than others. (Wittgenstein, Boyd).
- (ii) Meanings or intensions are ‘out there’, not just in our heads. They are not simply descriptions, but are ‘donated’ by the entity concerned in mutual interaction with social cognitions and language. (Kripke/Putnam).
- (iii) Extensions of concepts, their sortals, are also ‘out there’, as well as held in the mind as ‘templates’. Our ability to reidentify anything is an interaction between the internal template and the external phenomena. (Millikan).

(iv) It is important to acknowledge in our dealings with classification and its consequences that some social kinds are interactive with their categories in ‘looping effects.’ (Hacking).

(v) That since the purposes and projects we pursue in classification are varied, it is permissible to hold as valid and useful a number of different ways of classifying the same phenomena. There is no single right way, but multiple legitimate ways of representing nature. (Dupré)

(vi) The utility of human recognition of homogeneities in the world is the product of the ways in which reality is constituted and the inferential and explanatory uses to which that recognition gives us access. (Boyd).

## 5 THE LINGUISTICS LENS

Classification involves putting similar individuals, phenomena, actions, etc. into appropriate categories and using the same word or label for all members of that category. For that word to have intension or ‘meaning’ as commonly understood, it must ‘signify’ or refer to the same object, phenomena, action, etc for other members of the same linguistic group. Meanings are shared. To truly understand the classification of abstract institutional kinds such as business strategies, we must grasp the intension and extension of the words we employ to signify categories lacking physicality. Simple ostensive reference is problematic. Philosophy and language are inextricably interwoven and in the previous section the selected aspects of Wittgenstein’s work, in particular, has focused upon coverage of his theories of language. This includes his belief in the public, social nature of language and this is the matter we explore first.

### 5.1. Action under a description and collective intentionality.

A business strategy classification scheme is an intersubjective set of terms or labels which ‘call up’ more complex descriptions of coherent organisational and functional action(s), possibly by pointing to (i.e. ostensive reference to) typifications or



exemplars of such activity. Since business strategy in our context is elusive of easy specification and involves collective action, the ‘intersubjectivity’ of strategic activity has been emphasised. That is to say, the importance of collective understanding via common terminology and its shared interpretation has been stressed. Only with some ability to share meanings can collective intentionality be achieved.

Elizabeth Anscombe, John Searle, and Ian Hacking, (philosophers all) have developed various themes of ‘acting under a description’ which underpin two important points for our discussion of collective intentionality and language. Anscombe, a student of Wittgenstein’s, writing in the 1950’s, pointed out that actions are intentional under some descriptions and not others:- a man observed regularly raising and lowering a pump handle is acting intentionally under the description of ‘pumping water’, but not so with regard to all sorts of other descriptions that could validly be offered for that same action (exercising muscles, beating out a rhythm, etc). Searle built upon Anscombe’s work, and that of J L Austin (1955) on ‘speech acts’, in emphasising the constitutive nature of collective intentionality in establishing institutional facts. He describes the imposition of status-function through collective intentionality, usually expressed via speech acts, and stressed the importance of the provision of some label at the same time. This label he describes as ‘epistemically indispensable’, since institutional facts cannot be recognised by virtue of their physical properties (i.e. status symbols) alone. These labels are units of meaning in communication. Such institutional facts are constituted by and constitute descriptions under which we create and act in the social world (Searle, 1995, 1999). Hacking claims that the range of descriptions provided by a culture constrains and conditions the range of intentions available to the individual agent. He points to the importance of language, the media and expert communities in providing and enriching that range of descriptions (Hacking, 1999, 2002b).

Thus, one critical role of a formal proposal for a means of classification of business strategies is that it provides a set of labels or descriptions under which to communicate collective action. These labels ~ intersubjective descriptions (often contrastive) ~ establish categories of prospective action under which business strategies can be conceived, evaluated and communicated. The second important role, is that shared knowledge of the descriptions called up by these labels thereby enhances the possibility of the collective intentionality itself coming to fruition. We can only inspire,

motivate and direct with the words at our command. Having good business strategy labels aids achievement of the intended strategy. Words do not only reflect the world, they also affect the world.

## 5.2 Lakoff, et al – linguistics, cognition and metaphorical origins of meanings.

George Lakoff takes a somewhat different perspective on categorisation; arguing from how we use natural language and classification to how the mind works. He provides a socio-linguistic and cognitive science view of categorisation and much else besides. His main contribution is in postulating that the way that people organise their knowledge is by means of mental structures that he terms '*idealised cognitive models*' (ICMs). For Lakoff, category structures and prototype effects are by-products of that organisation, rather than the assumed essentialism that underlies the classical view – a view he labels as 'objectivist'. His 1987 book debunks the objectivists' idea of 'correspondence' in categories when dealing with socially constructed phenomena and stresses the use of metaphor (often based in physiognomy) in language and classification. There is much here that moves us from an abstract, philosophical approach to one grounded in experiment and case study and Lakoff writes of the new views derived from cognitive science – contrary to the view of categories being internal representations of external reality, he argues that they stem from the nature of ourselves as organisms capable of reason. The contribution of his colleagues at Berkeley, and in particular the mathematician Lotfi Zadeh and cognitive psychologist Eleanor Rosch (Heider), to his thinking is amply acknowledged in this work.

Zadeh is best known for his 1965 work on systematising 'fuzzy sets' for categories with graded membership, making them more tractable for quantitative work. Fuzzy categories are those where membership is by degree or partial rather than the binary in / out membership implicit in essentialism. Zadeh's work provided practical tools for dealing with non-dichotomous concepts. As well as application in engineering and computing, Zadeh's fuzzy sets and systems can be applied in qualitative analysis of social phenomena, where the concepts under examination have vague boundaries and degrees of compliance (Ragin, 2008; Smithson & Verkuilen, 2006). The salient significance here is that Zadeh was able to turn Wittgenstein's intuitions and evidence of fuzziness about categories into a practical demonstration of how such phenomena can

be made tractable and applied to practical effect. Lakoff's interest being in application of such concepts to polysemy in language, where word / concept meanings are nested in networks of adjacent meanings.

Rosch has a particular interest in categorisation and is best known for her 'prototype theory' developed with a number of colleagues over many decades from the early-1970s. Her many empirical studies of natural language cognition also provided empirical confirmation of Wittgenstein's notion of family resemblance and of the importance of category structures held in the mind in determining the course of human reasoning and inference. Such structures include the hierarchy of superordinate, basic and subordinate classifications that have been described above. They are found across all cultures, with 'basic' categories being foremost in cognition and knowledge organisation. However, our categories are clusters of interactional properties; they are not simply in the world, but have to do with how we interact with the world. She also demonstrated 'prototype effects' where some examples of a general category are held to be more central or typical of that category e.g. 'robin' is more likely to be cited as an example of a 'bird' than a 'penguin' or 'ostrich'. Her work with children also demonstrated that early category acquisition is mostly at the 'basic' level, with relational and hierarchical structures acquired later in development. Categories are certainly not acquired in childhood in the way that formal classification schemes are taught later in life.

Lakoff, in addition, summarises the works of others on frames, scripts and schemas, his own contribution being rather more focused upon language(s) and his notion of Idealised Cognitive Models and, together with Mark Johnson (Lakoff & Johnson (1980/2003), his work on the importance of metaphor, metonymy in the creation and structuring of conceptual categories. He also described other linguistic features which yield prototype effects in what he terms 'radial categories'.

The claim is that in the light of the experimental evidence on perception, language and categorisation, the real world cannot be understood in terms of classical or essentialist theories about our categories. 'The main thesis of this book is that we organise our knowledge by means of structures called *idealised cognitive models*, or ICMs, and that category structures and prototype effects are by-products of that

organisation' (Lakoff, 1987, p 68). In brief, the ICM is a mental network of meanings, which draw upon other meanings that provide a gestalt, that is, finally, constitutive of a fully rounded concept. For example; the concept 'Sunday' can only be grasped in relation to a frame that contains the measurement of time, a (Christian) tradition of a seven day week, the sequence of these days, the conventional working week, etc. (A set of anchors increasingly less potent). For Lakoff, the fundamental building block of categorisation, the basic level, reflects the nature of the human body as determined by human neuro-physiology, gestalt perception and motor movements, and also by our imaginative processes of many kinds and our ability to construct and use idealised models and to extend these from central to non-central members via metaphor, metonymy, mythological associations, images and other relationships. These basic level concepts 'are directly meaningful because they reflect the structure of our perceptual-motor experience and our capacity to form rich mental images.' Upon this foundation of direct meaning structures we base indirectly meaningful symbolic structures built by our imaginative capacities. 'But despite the fact that we rely centrally on our bodily natures and our imaginative capacities, experientialism has maintained a form of basic realism, since our conceptual structures are strongly (though by no means totally) constrained by reality and by the way we function as an inherent part of reality.' (Lakoff, 1987, p 372)

Lakoff's approach is less that of the experimental exercise than the examination of everyday speech. He explores metaphor, metonymy and figures of speech, not as features of literature and poetry, but as natural components of how we think about the world. Thinking that is often traced back to our bodily nature ('the embodied mind'). Thus, expressions such as 'just give me five minutes'; 'Germany is pulling the European economy out of recession'; 'world food prices are rising'; or 'the economy has stalled' are examples of how we think about time, economics, increase, or the like. These are not ornaments of style, but ways in which we have structured thinking about the abstractions that figure so strongly in our complex understandings of science, society and economic life. So, conceptual categories are, as set out above;- not just characterised by objective properties of category members but are determined, at least in part, by our bodily nature and in part by our imaginative processes such as metaphor, metonymy, scripts and frames, mythological associations, mental imagery and other conceptual relationships. They provide the basis upon which we derive our broader

inferences from the cues provided by language. So embedded is this that we are very largely unaware of these processes.

Words are pliable to our purposes and language is a living means of extending our meanings to new ends via the mechanisms that Lakoff describes. Intensions in the social sphere are not stable and given, but are constructed and shared in a linguistic community. A community that shows endless ability to modify and extend meanings in meeting the challenges of what we need or want to conceptualise and frame in words. Lakoff provides the rationale for the potency of richly connected category labels such as ‘defender’ over simple identifiers such as ‘category D’. This is, potentially, a more positive spin on the way that meanings, e.g. in organisational and management science, are subject to what others term fads and fashions.

### 5.3 Contemporary linguistics; Ungerer & Schmid; and Taylor.

The outline of Lakoff’s work, and that of his colleagues, provided above is similar to that found in Ungerer & Schmid’s *An introduction to cognitive linguistics* (2006) and in John Taylor’s work *Linguistic categorisation* (2003). Both follow a similar exposition of the empirical evidence from perception and linguistic studies to a rejection of the necessary and sufficient version of category construction. The rich but complex picture that emerges might be taken as providing a broad consensus within a substantial group of contemporary linguists. However, as is often the case, the individuals comprising that group may be more concerned to differentiate their own views from near, but subtly different, views of colleagues. We select here some additional notions that figure in these works.

Ungerer and Schmid, in exploring fuzzy sets, make an interesting distinction between graded structures or degrees of typicality within categories (robin v ostrich in ‘bird’) as outlined above, and the blurred nature of category boundaries, particularly in relation to artifactual and social kinds. Thus, the boundaries between ‘cup’, ‘bowl’ and ‘vase’ can be demonstrated to be vague or fuzzy and our sortals are characterised by contradistinction as much as by definition or prototype. They also place more emphasis upon ‘part / whole’ (e.g. table > kitchen > house > town) as well ‘type of’ (e.g. greyhound > dog > mammal > animal) hierarchies as classification structures. Whilst

acknowledging that the latter are the conventional form of taxonomies, Ungerer and Schmid emphasise the importance that part / whole relations play in cognition and enhancement of inferential potential. 'They are often more tangible than taxonomic relationships and seem to play a more decisive role in structuring cognitive models in our memory.' ( Ungerer & Schmid, 2006, p 343). Their text also develops at some length the notion of perspectival choice in language. This stresses that for any 'objectively given' situation the observer has a virtually unlimited choice of lexical items (words) and grammars with which to foreground and frame the scene. The observer is, thus able to 'window' the attention of others to his or her own interpretation of that situation, despite the variety of alternative, equally plausible, interpretations available.

Taylor's book follows very similar ground. He does, however, expressly locate himself in the middle position between essentialism and nominalism, in what he describes as 'conceptualism.' He argues as follows:- Language imposes a set of categories upon its users, but the fact that something is conventionalised does not entail that it is arbitrary. It will be motivated by existing discontinuities in the world. But it will also be motivated by culture and cognition. So social conventions and ontological motivations are both at work. This explains why different languages generally are found to have words equivalent to each other for the same phenomena, but this is far from a one-to-one correspondence. Languages are diverse with respect to the categories they encode, but this diversity is far from being unconstrained.

#### 5.4 Eco and Cognitive types.

The Italian academic and popular novelist Umberto Eco has approached the question of kindhood from a European tradition of semiology that originates from the works of Ferdinand de Saussure, which is distinctive from CS Peirce's semiology. Eco, however, is fully cognisant of Peircean claims and draws heavily, but not uncritically, thereon. Eco's work *Kant and the platypus; essays on language and cognition*, (1997) and Boersema (2009), are the main sources of this discussion of what Eco calls his 'contractual realism' about how we refer to classes of things. The key question that Eco addresses is that of the degree to which our ability to comprehend the world rests upon innate cognitive ability and how much upon our linguistic reserves.

According to Eco, since there are many more entities in the world than there are symbols in the mind, some of these symbols must stand for many entities; thus the world is not so much segmented as segmentable to our purposes. The central focus is on the question of what it takes for expressions to be meaningful to a community of speakers. He attempts to reconcile external realism with internal realism via a recognition of the collective conspiracy that is language and accepts Strawson's claim that referring is not something that an expression does, but something that people can do using expressions. Speakers, not expressions, refer. This requires a contract or negotiation between speakers; a mutual agreement to use this symbol to refer to that object in the world. There is no causal relationship between the term and its meaning and designations rely upon this initial contract which assigns a generic label. Eco argues that, whilst the descriptions we apply to the world are always perspectival, there can be 'good' and 'bad' interpretations. He cites Habermas as saying that reality imposes restrictions on our cognition only in that it refuses false interpretations – some can be plain 'wrong'. Using examples of early encounters with the rhinoceros and duck billed platypus or even men mounted on horseback, Eco argues that 'the first impressions on our senses are not representations of certain things unknown in themselves, but that these very first impressions are something unknown until the mind manages to wrap them up in predicates' (Eco, 1997, p 61). He is, however, sceptical of Kripke's rigid designations, arguing that names have an ability to refer, as well as providing us with that ability.

Rejecting what he terms as C S Peirce's 'compulsive triadism' and 'naïve iconism', Eco propounds his own triadic semiotic theory of cognition. The three elements being:-

a) Cognitive Type (CT) :- An internal mental compilation of information pertaining to an entity. Eco likens this to a Kantian schema that allows us to mediate between the concept of the thing and the manifold of sense and other data relating to it. It is what enables the individual to recognise tokens of the type 'deposited in memory'. Eco refuses to look into the 'black box' of how cognition, recognition and felicitous reference works – citing the failure of the cognitive scientists to come up with any better answer than that provided by the common sense acknowledgement that we have the

capacity to perform the task. Whatever it may be, a CT is what enables us to recognise and in this associate the recognition with a name, type, schema or what have you. Eco relates how the Aztecs or the curators of the British Museum were faced with unknowns – horsemen and the platypus respectively – and how naming is the first social act that enables us to recognise various individuals at different times and places as nevertheless tokens of the same type.

b) Nuclear Content (NC) ; - Once the area of consensus and a label has been established under the CT, it is possible for the linguistic community to proceed to a collective interpretation in a set of homologised descriptions that Eco terms the Nuclear Content (NC). This establishes what the salient features of the entity are as regards some third party identification. Eco rejects the natural term that springs to mind – ‘meaning’ on the grounds that we equate meaning with an individual’s mental experience, whereas he wishes to preserve the collective nature or public sense of the CT that is expressed in the NC. Whilst the CT is a private perceptual semiosis, the NC is a public communicative consensus. ‘The NC represents the way in which we try intersubjectively to make clear what features go to make up a CT’ (Eco, 1997, p 138). The NC can be tangible, the CT cannot. The NC provides the child with the means to identify, at first sight, say, a giraffe at the zoo (and to recognize it again on the next visit) and the ability to retrieve information regarding, say, the identification of an individual one has not personally met, or giving directions to a foreign tourist to a destination one has not personally visited. The NC is the basis of the dictionary definition.

c) Molar Content (MC) ; - This notion is less well fashioned by Eco, but refers to the broadened knowledge that accretes around the NC as one learns and experiences more. It is, for example, the knowledge of where giraffes are found in the wild, that they are mammals, their typical diet and ecological niche, and so on. It is data that is inessential to identification, but otherwise expected of an informed member of the linguistic community and indispensable for any expert in the field. The zoologist will have a MC of a horse, and so will a jockey, even though the content may vary between the two; and Putnam’s ‘division of linguistic labour’ will occur, albeit Eco prefers the term ‘division of cultural labour’. To Eco, the sum of MCs regarding an entity or concept will sum to an encyclopaedia entry for it.



There is much else in Eco's contribution that is distinctive, but the focus here has been upon his contribution to the linking of token to type, to dictionary, to encyclopedia. This complements Lakoff's ICM and is, in chapter 3, combined with Millikan's work to provide an explanatory framework within which we explore the pragmatic value of business strategy classification schemes in terms of their potential value in generating sound inferences.

### 5.5 Contribution to understanding classification schemes.

The arguments advanced in sections 5.1 – 5.4 above all amount to an exposition of five central points:-

- (i) First, the indispensable nature of language labels attached to concepts and categories where ostensive reference is inadequate to convey meaning.
- (ii) The set of categories imposed upon language users is motivated both by discontinuities in the world and by culture and cognition.
- (iii) The importance in achieving intersubjectively shared meanings such that the social or collective intentionality of a strategy can be achieved.
- (iv) The inadequacies of the classical view of classification have been underlined in much empirical work in linguistics. The suggestion is that linguistic capacities are more subtle in affording us with the mental wherewithal to construct and adapt conceptualisations that owe little to dictionary definition and much to accretion of category knowledge around the linkages afforded by our physical and mental make up.
- (v) This work points to the way in which we are able to think and reason by inferences. This capacity, based upon ICMs or MCs (or whatever like construction the individual cognitive linguist proposes), originates

in the ability to interrogate and develop the mental repository at our disposal that is provided by language in all its richness. This latter point is developed further in Chapter 3.

## 6 THE PSYCHOLOGY LENS

Whereas linguistics deals with the public, shared phenomenon of language, psychology, particularly that branch termed ‘cognitive psychology’, is concerned primarily with individual mental processes. We have already, in the works of both Lakoff and colleagues and Eco, as discussed above, strayed into the realm of individual minds. The aspect of cognitive science that is of interest here is one that straddles both linguistics and psychology as applied to representation and conceptualisation in general and this section is focused upon just three matters. First, is the general aspect of human cognitive representation of categories as contributions to efficiency of mental processes. Secondly, we deal here with investigations of ‘folksonomies’. These are considered here since the main work in this field is that of psychologists and ‘cognitive anthropologists’. Thirdly, is a description of the work of developmental psychologists in uncovering and investigating a seemingly widespread innate cognitive bias towards essentialism in dealing with everyday categories.

### 6.1 Semantic Networks and Schemas

On the first question, Miller (1985), neatly summarises the fundamental importance of effective categorization thus: ‘All organisms achieve some presentation of their environments adequate for their survival as a species..... categorisation is a basic process in the construction of any such representation: at the very least, substances must be categorised as edible or inedible and organisms must be categorised as friend or foe. Insofar as we can discover something about the categories recognised by a species, we can come to appreciate something of the world in which it lives.’ (Miller, in Aitkenhead & Slack, 1985, p 9). The main means of human representation being language, mental models and images. It is Smith & Medin (1981) and Rumelhart & Norman (1985) that take this concern to the level of empirical studies of representational systems within humans, largely via examining the semantic features

and attributes of historical and artefactual kinds. Their findings tend to show that category membership is sorted via both defining features ('has feathers') and characteristic features ('can fly') which help confirm appropriate categorisation, but also that what is salient depends upon context. Such work indicates that categories are stored hierarchically and to confirm that some categories are judged more typical than others. This complements the earlier treatment of the work of Rosch and colleagues on prototypes. As Lakoff writes - seeing involves categorising; to see a 'tree' we must have an idea of the category 'tree' in our vocabulary of things in the world. Whilst the philosophers have tended to focus upon what properties are used to classify (i.e. are there essences in play ?), the cognitive scientists are equally concerned both with classification from known properties and inferring unknown properties from categorical information (i.e. a greater focus upon the uses to which categorisation is put).

Where, however, the cognitive scientists provide some overlap with the treatment provided earlier in this chapter, it is in relation to 'semantic networks', 'schemas' and the affordance of inference. Psychologists regard schemas as units of culturally shared knowledge that employ the neural networks of the individual brain, but working to a largely common, culturally acquired, blueprint laid down in socialisation and language acquisition. Semantic networks and schemas (Abercrombie, 1960; Harré, 2002a; Rumelhart & Norman, 1985; Smith & Medin, 1981) provide a means of tracking and noting the valences of our individual categories in links to our overall conceptual structures. Concepts are seen as nodes of meanings interlinked with other meanings by a pattern of relationships that are super-sets or sub-sets in a total network. Schemas are data structures for representing generic or prototypical concepts stored in memory.

It is schemas produced as stereotypes derived from experience, or via transmission from others, that erect frameworks around concepts and that enable hierarchical structures of concepts to be interrelated one with another within fairly well-defined patterns. Properties are both noted and derived according to processing rules reflecting natural brain processes and the cognitive structures provided by the schemas. The whole set of neural connections is deployed in achieving a categorisation (Eco's NC), and is then available to make further inferential connections along pathways suggested by our schemas. The importance of and connection between the

utility of classification schemes and their use for inference, as set out by the philosophers, the cognitive scientists and the semioticians, is combined in this presentation of the brain's neural network's ability to afford connections – to bring into play Eco's full MC or encyclopaedia of knowledge, once the trigger classification is made. The schemas provide the equivalent of an encyclopaedia's entry's very fullsome cross-referencing system.

As Abercrombie (1960) points out, the schema we employ in the interpretation of sensory inputs are crucial to the way in which we each construct our knowledge or construe the world of institutional facts. And at aggregate level Searle's institutional constructions depend upon shared schema. Byrnes (1996) attributes four functions to schemas:- (a) They help categorise experiences and make more efficient use of memory and knowledge retrieval capacity. Only the significant (new) information has to be added to memory storage. (b) They improve the efficiency of memory because one can retrieve the whole linked information set of the schema from just one aspect. It is a network of linked memories. (c) They help us to understand what is going on by bringing rich associations with the schema to the input. (d) They help us to solve problems, since after repeated encounters with problems of a like nature we form schemas for their solution (heuristics derived from schemas).

Hence it is possible to regard classification schemes as a particular type of schema. A type that provides not just mechanisms for recognition, but also potential 'inference machines'; mechanisms that can be appraised in terms of their capacity for the affordance of grounded inferences.

## 6.2 Folksonomies: natural, or naïve, classification schemes.

The term 'folksonomy' has been somewhat captured by internet browser and search engine design experts over recent years to refer to a system of classification and tagging of data content based, not upon top-down systems, but upon collecting the activities of numerous individuals browsing and searching for information content. This

provides a public, macro revelation of the private internal connections of individual minds. Thus tags and annotation of content can be developed organically, bottom-up. However, in the sense used here, a ‘folksonomy’ is any method of naming and sorting of phenomena that relies upon natural sortings of entities by similarities, rather than by acquired taxonomic or scientific classification systems. The major source being Medin & Atran, 1999). There, the authors argue that all cultures have their folksonomies and that there is a universal structure where, when dealing with the natural world, there is a basic or species level, plus super- and sub-ordinate levels. The book also reports a number of case study comparisons between native pre-scientific categorisation of nature and their scientific equivalents. Atran finds, for example, that Itzaj Maya natives of the rainforests of Guatemala have a thorough understanding of native flora (better than trained biology students) and that their knowledge is structured in classification systems of species-like groups and higher and lower orders. He comments; ‘Like folkbiological taxonomies everywhere, it also provides a general inferential framework for category-based inductions’. The authors speculate upon whether our categories simply reflect perceived similarities or some deeper essentialist theory of why / how things are.

There are two important points in this work. First, is that a number of these authors argue that the folksonomies examined are generally of equal, if not greater, utility to their users than scientifically based taxonomies. See, for example, Dupré’s essay ‘Are whales fish ?’ This is differentiated from a purely scientific systematics in biology which seeks to maximise inductive potential, regardless of human interests, as a route to understanding nature ‘in itself’. Their contributors take different positions as to whether the scientist is best advised to regard folksonomies in biology as a ladder to be discarded after it has been climbed to greater heights of knowledge. The second point is a claimed ‘fitness’ in evolutionary terms for such capacities since they are central cognitive properties to a determinant of survival (see also Barrett, 2001). This is developed further next.

### 6.3 The naturalisation of classifications ~ ‘Psychological essentialism’.

There is a specific interest and relevance in what cognitive science tells us about the way in which we interpret the classifications encountered in social learning and

enculturation. In particular, Medin and his colleagues (Medin & Ortony, 1989), is particularly associated with consolidating the concept of 'psychological essentialism'. This holds that a) people in all cultures intuit that a received, established classification entails an essence, and b) they reify the classes into reality irrespective of the lack of (personal) evidence or experience. Thus, the classes we have been given in enculturation appear to stand for the way the world is ~ they are enacted in our beliefs. Spurred by this theory, developmental psychologists, particularly Susan Gelman (2003) and her many co-authors, have conducted many practical experiments into the nature of categorisation in children, even down to pre-linguistic infants. This seems to confer a pragmatic proof to the concept that we have an instinct to essentialise, albeit many different explanations for this attribute have been adduced. There is far too much in this work to give adequate coverage in this thesis. But Gelman's own conclusions, based largely upon experimental data, are very briefly outlined below:-

- \* Belief, not knowledge, is what she is exploring and beliefs can be sustained by 'placeholder notions' of divine design (God's will), essence, heuristic value, social expectation as to 'correctness', etc.
- \* Children readily infer that category members share hidden properties and that given category labels are more important than apparent properties.
- \* Categorisation is the inference from properties to category membership and such categories carry lots of inductive potential where the entities being categorised belong to a kind and the property is relatively enduring.
- \* Boundaries tend to be intensified, in that things are seldom partly category members. (Less cogent as regards artefacts).
- \* Similarity based categorisation is less potent than causal explanations.
- \* The nature of innate essentialism varies according to the type of kind involved. It is particularly strong for biological kinds and weak for artefacts.
- \* Enculturation and language are powerful reinforcers of essentialism, but the tendency is there prior to enculturation and acquisition of language.

Barrett's conjecture (2001), is that such a predisposition to essentialism serves an evolutionary fitness function to enable inductive generalisations from nature and, subsequently, from culture. Inductions which can prove critical to survival. It is preserved through to modern times because it is useful, even if it is a useful fiction. Whatever the merits of the argument advanced by Gelman, Barrett and others, there is here recognition of an important human propensity to 'essentialise' categories that may unconsciously underpin approaches in the social sciences to investigations aimed at classification schemes. At core it may be that we tacitly assume, when being inducted into a new scheme of classification of social phenomena, that there is some hidden essence which causes and validates that scheme. This, again, is a point picked up later in this work ~ that there is a tendency for putative classification schemes to assume a mantle of 'essence' when there was no such aspiration or claim in the original propagation of the scheme. This reification can, of course lead to an instrumentation and research approach that inevitably leads to disappointing results (see case studies).

Similar observations are contained in Lakoff 1987, who notes that people have a tendency to believe that things come naturally in well-defined kinds, characterised by shared properties and a single right classification scheme. He refers to this as a folk theory of categorisation; a theory of which we are unaware, but is implicit in the way we talk and act. And Bowker and Star (1999) write of the 'naturalisation' of our categories, pointing out that it is often in the interests of those in authority deploying some (entirely nominal) classification system to make implicit claims to its 'naturalness'. They write 'The more naturalised an object becomes, the more unquestioning the relationship of the community to it; the more invisible the contingent and historical circumstances of its birth, the more it sinks into the community's routinely forgotten memory' (Bowker & Star, 1999, p 229).

#### 6.4 Contribution to understanding of classification schemes.

This selective drawing upon ideas from the psychology domain contributes the following precepts to this work:-

- (i) Our natural classification practices employ schemas that (should) support efficient mental processing and afford grounded inferences.

- (ii) Folksonomies, or non-scientific (or pre-scientific) classification schemes fulfil the same task, and can prove equal to or better than formal scientific schemes in contextual use.
- (iii) We have an innate tendency to infer that reasons or essences underpin the categories encountered in our everyday epistemic practices.

## 7 CONCLUDING REMARKS – ONTOLOGY REDUX.

A paradigm of the difficulty of category imposition in complex areas has been amply, if inadvertently, demonstrated in the above attempt to (a) define our ‘object’ in the way that lives up to expectations of a ‘scientific’ approach and (b) to disentangle the three ‘lenses’ as between the disciplines: Wittgenstein straddles philosophy and linguistics; Rosch is a cognitive psychologist whose work has been very influential in linguistics; and Eco is as much philosopher as semiotician. Nevertheless, this has been a truly interdisciplinary mix of perspectives upon a subject that warrants such an approach. This chapter has attempted to throw light upon the processes involved in refining a concept and in examining its nature, not as a definitive statement of belief, but as an exposition of the crucial truth that there are many perspectives and none is paramount.

### 7.1 Does all this do away with ‘essences’ ?

In many ways sections 4-6 above have traced a retreat from the traditional conception of classification as a question of natural necessity and essential properties to a more nominalist construction and psychological projection. Certainly the notion of necessary and sufficient conditions determining our categories has suffered much critical assault. However, a careful reading of most of these authors leaves a residual belief that the world contributes to our categorisations, even where nominalist constructions are being described. First, it should be noted that there is, almost inevitably, an acknowledgement that some natural kinds are known to us as kinds based upon their given essential properties. Even if it is also suggested that as knowledge advances we may well revise our notions thereof. The key Lockean departure from



classical assumptions is qualified by his own observation that there are inner ‘real essences’ ~ the atomic constitution of things. It’s simply that, being unable to see anything more than their manifold properties, we don’t (yet) know them. He did entertain that science might bring these unobservables to light. Boyd suggests that realist constructions best account for the utility we obtain from our classification practices. That ‘essence’ can be construed as an observer-independent ontology that determines the explanatory and inferential value of our categories. Eco writes of nature as being unsegmented, but having a ‘grain’. He holds that our carving of nature is best with the grain, or at the joints.

Thus, our sources above do, in various ways, acknowledge the possibility of categorisation based upon ontology, especially in the natural sciences. However, to extend this to the social sphere would, one suspects, stretch the claim of essentialist fundamentals for many of the above authorities cited above. The literature in all three disciplines indicates divisions when it comes to social and abstract, conceptual kinds. A division that would line up many a natural scientist as against the possibility of social kindhood. On the other hand, a critical realist position would be reconcilable with an essentialist construal of social phenomena in that the similarities in society are as much a prominent feature as the dissimilarities, and these similarities are not the result of mere coincidence. (DiMaggio & Powell, 1983; Oliver, 1991). The fact is that in organisational science one low cost airline is pretty similar to another; one corner shop pretty much like another; etc., if one chooses to look for the similarities (taken for granted in even talking about ‘a low cost airline’; ‘a corner shop’). Thus reasons for conformity can be found in the relevant structures, powers and tendencies of the social realm ~ what are here termed ‘homologating forces’. See Bhaskar 1979; Danermark et al, 2002; Elder-Vass, 2010; Harré & Madden, 1975; Lawson, 1997, 2003; Sayer 2000.

## 7.2 Where next ?

Chapter 3 examines the proposition that much of the heat in these topics would be reduced were we to adopt a pluralist approach to the classification of classification schemes themselves. Some classification schemes may reflect scientific knowledge of underlying causality or regularities of a pretty reliable sort, such that fairly reliable inferences are derivable from knowledge of category. Others may reflect not underlying

causes or reliable conjunctions of events, but simply observable similarities. Whilst others may represent nothing more than useful heuristics, or ‘filing systems’ where we can group things for our convenience. Whatever types of classification schemes we adopt in the organisational and management sciences it seems sensible to deconstruct the notion that they are all of the same nature. An alternative approach, and its implications for evaluating the inferential potential of the resulting categorisations, is the subject matter of chapter 3.

## Chapter THREE

### PLURALITY AND UTILITY.

*‘If Marx’s social theories, for instance, have merit, then it should be theoretically illuminating... to classify people as proletarians and bourgeois. But of course no one believes that all proletarians share a common essence. What they share is what the theory says they share, a relation to the means of production. But for other purposes it will be more relevant to speak of their nationality, their gender, the precise industry in which they work, or many other things’.* (Dupré, J. 2002. p95-6).

#### 1 INTRODUCTION.

Apart from clarifying business strategy and its classification as the research object, previous chapters have described a typology of kinds and summarised the relevant thinking regarding kindhood from philosophy, linguistics and psychology. Such across-the-board material makes little connection with the literature on business strategy that forms the bulk of the empirical material for this thesis. The object of this chapter is to provide a bridge between these domains and to introduce and outline some of the theoretical constructs that will be deployed in making sense of the business strategy classification schemes that are at the heart of this study. In so doing, this chapter provides an overall argument for a re-appraisal of classification schemes as encountered in management and organisation studies. An argument that, potentially, is of interest to any discipline engaged with abstract institutional cross-cutting kinds (see p 49 above) such as might be found in the social sciences.

In particular, the case will be made here that classification schemes are not all of one type and for selecting schemes according to the task in hand. This is with particular reference to schemes that categorise business strategies, but, in addition, may be of wider relevance. Some such categorisation may be better for some tasks than others. The nature of the primary contribution of classification schemes in the abstract social realm is cognition and inference, but other uses, such as simple information storage and

retrieval, must also be accorded recognition. This chapter will argue for plurality and utility as prime features of categorisation in the social realm, but, above all, is claiming that how we construe the social ontology of such classification schemes is critical to employing them effectively in social epistemology.

### 1.1 Classification Schemes.

First, a simple re-cap of the purpose of kind-finding or classification into categories: It is of tremendous advantage to cognition to be able to group together the separate but numerous and repeated encounters with the various tangible and intangible phenomena of the experienced world via our ability to recognise repetitions of the same entity or concept type (Braisby, 2005; Millikan, 2000). Otherwise the capacity to make sense of the senses would be overwhelmed (Smith & Medin, 1981). Classification is but one aspect of this recognition and sense-making process and it involves segmenting or dividing up the world into categories such that, through finding commonality, it is far easier to deal with. In addition, we arrange our categories in relational structures that themselves make cognition more effective. These are termed here ‘classification schemes’ and the empirical material of later chapters comprises a number of business strategy classification schemes.

This partitioning of stuffs or impressions and / or the groupings together of individuals or concepts, via classification schemes, creates an easier task of sense-making by simplifying repetitive cognitive operations, linking categories in meaningful ways and allowing inferences from one member of a class to other members of the class and how it / they stand to members of other categories. Inferences, that is, concerning the common characteristics and properties of class members and their relations with non-class members. Thus, recognition and classification into categories, and the arrangement of categories into classification systems, is about finding a commonality amongst encounters with the world and their relations one to another that is useful to us. Utility, in the sense of practical adequacy in performing its intended task, therefore is the cornerstone of the approach adopted here: and, thus, is somewhat distinct from the usual discussion of classes or kinds rooted in philosophy. The approach adopted here is an epistemic and pragmatic one that recognises, nonetheless, the importance of ontology.

Classification schemes can themselves range from, for example, the full, publicly recognised and available Linnaean system of botanical naming which can be applied to the plants in my garden, or to anyone's garden anywhere on earth, to the partial, private and somewhat idiosyncratic order in which I choose to place my non-fiction books on the shelving, and which, probably, only I can follow (that is, when I do remember what had seemed 'right' at the time of shelving). Thus, there are different types of classifications and a typology of such schemes is suggested here. Note also that there is a distinction to be drawn between the idiosyncratic, personal and private categorisation schemes we adopt in daily life ('urgent' v 'pending' or 'friends' v 'acquaintances') and the types of classification schemes being examined here. Our focus is upon formal, publicly recognised, or 'scientific' schemes that offer a relational structure of categories asserted, or assumed, to be relevantly defined and arranged. Such schemes exhibit the following general characteristics:-

- \* Designed – the schemes are crafted with an aim in mind beyond simple personal use, even if the conceptual origins were extemporised and / or personal. These schemes are associated with an author or originator; a designer.
- \* Segmented field – the area of interest is conceptualised in terms of a number of discrete or discriminable categories with both intension and extension established in relation to contiguous and, on occasion, superordinate and subordinate, categories and fields.
- \* Intersubjective – the schemes are intended for collective discursive use in the domain in question. This often comprises a particular specialist interest group or community of practice or disciplinary matrix. In our specific case, the categorisation of business strategy by strategists and all with whom they seek to communicate.
- \* Promulgated – the schemes have been put forward and promoted by their originators for public use within the domain in question. There is generally some implicit or explicit claim associated with the promulgation which valorises the scheme in some way (naturalness, parsimony, internal homogeneity and external heterogeneity, etc).

\* Adopted – the schemes examined here are those that, in one way or another, have been, or offer the potential to be, adopted. In some cases this means fairly widespread application in discourse and research (entry into the specialist language of the profession). In others, it means at least published in a formal context of journal article or textbook; i.e. has moved beyond the personal into the public arena.

The discussion found in the philosophical literature and elsewhere (including here) tends to polarise the construal of kinds in either an essentialist or nominalist vein. But this either / or exposition is under increasing challenge. Braisby (2005) speculates that the failure to determine a single successful embracing account of concepts and categories may be due to any combination of the following points:- (a) categorisation may not prove to be a single cognitive process; (b) categories being differentiated by the nature of their properties and theoretical treatments; and (c) groups of people categorising according to different goals. And Dupré's 'promiscuous realism' (Chapter 2.4.9) is a pluralist position, that argues for co-existence and qualified equality of status for variously competing classification schemes in the same field. The pluralist argument regarding these formal classification schemes is easily stated:- 1) irrespective of their ontological status, all these schemes reflect human construction; 2) the basis of that construction can vary; 3) accordingly, there are different types of classification schemes; and 4) there are different uses to which they may be put ~ what is suitable to one application may be inappropriate in another. Legitimacy can be as much a product of epistemology as ontology, and a balanced judgement is required that prioritises the utility of the construct. The contribution of Boyd (Chapter 2.4.10) is to emphasise that the practical uses of our classification schemes are enhanced by their conformity to any underlying causal structures; the bringing together of epistemic practice with ontology.

## 2 THE CHAPTER OUTLINE.

Recognising the discussion in Chapter 1 regarding the variegated nature of 'kinds' themselves, this chapter looks at how we might similarly regard the various classification schemes found in the business strategy field as being of various sorts, and proposes a typology of four different, but overlapping, types of classification systems,

only one of which makes claim to kindhood. This positions classification in a pragmatic perspective, asking the question ‘what constitutes a “good” classification scheme?’ The answer is expressed in terms of effectiveness in denoting and sorting and, in particular, at utility in providing connotations, or inferences, of value to the language community deploying the scheme. There follows an extensive discussion of classifications and their inferential potential. In this discussion, the approaches of the philosopher Ruth Millikan are combined with Umberto Eco’s semiotics, and Richard Boyd’s accommodation thesis. Further reference to the cognitive sciences is provided in terms of the relation between schemas and classification schemes, and our tendency to impute causality and ‘naturalness’ to classifications schemes ~ ‘psychological essentialism’ as described in the previous chapter. The arguments are then re-presented as a more inclusive yet appraising approach to (abstract social) kinds and their classification schemes, which suggests that social science has something to gain by greater attention to the underlying nature of its classifications. Finally, two sections look forward to the subsequent empirical work. The first, deals with the suggestion that the more prominent ‘motivated’ classification schemes are best regarded as theory made manifest. The second, is a trailer ~ It offers a tentative preview of the final conclusions.

## 2.1 Why all this is important.

As was explicated in Chapter 2, our ability to categorise and our facility in so doing has been a core interest of philosophers and thinkers down the ages. Indeed the desire to categorise or segment the whole field of knowledge itself was a preoccupation of, amongst others, Aristotle, Descartes, Bacon, Locke, Leibniz, Kant and Peirce, right up to Foucault (Burke, 2000). Yet, as described in Chapter 1, it is the particular deployment of kinds and categories within a discipline that is identified as being key to a progressive ‘science’ of whatever ontological domain. Many writers have remarked upon the domain-specificity of classification schemes, but it is particularly Richard Boyd who stresses their distinctive role in the particular methods and explanatory practices of a ‘disciplinary matrix’. In this chapter, the focus is very much on the role of classification schemes in management and organisational science, with particular application to the sub-field of business strategy.

It seems that in most fields of learning and practice we devise means of grouping phenomena both to ease sense-making within that field and to facilitate fence-building against rivals. Even though the separate disciplines which we identify (and defend) are not natural kinds in the usual sense, they are every bit as real as any other component of a socially constructed world of intellectual pursuits (Fish, 1989). Much of the demarcation of knowledge domains is conferred as much by a relational structure to other domains as to the essential focus of its content. For example, both Bowker & Star (1999) and Wenger (1998) stress the importance of what they term ‘boundary objects’ between communities of practice. Such barriers are complexes of practices, methods and, importantly for our enquiry, the concepts or kinds special to the domain – the way in which it identifies and distinguishes entities therein. The latter being intimately related to the specialist use of terms. In their characterisation of ‘expertise’ Collins and Evans (2007) emphasise the importance of command of language and concepts particular to the domain: ‘knowing whereof one speaks’. Thus, this enquiry into abstract social classifications, such as business strategy, also touches upon certain aspects of our understanding of divisions in society and their causes and consequences. Utility in deployment may be more than a question of the practical adequacy of the classification and may, *inter alia*, include personal social advancement within a community of practice. The socio-political dynamics of professional practice cannot be ignored when seeking to understand the adoption, or neglect, of a classification scheme (O’Keefe, 2009).

### 3 A TYPOLOGY OF CLASSIFICATION SYSTEMS.

In Chapter 1 there was an extensive treatment of ‘kinds of kinds’ as employed in this thesis. That distinction was an ontological one – the different kinds were held to have different existential characteristics. However, the representation and arrangement of these kinds in a particular domain as some ‘classification scheme’ is inextricably a human act. It is an epistemic distinction. An act which implicates human purposes of knowing in the representation: a scheme that serves to help in human understanding by identifying similarities and their relations. It is proposed, now, to take another ‘cut’ at our material, this time looking at the nature of classification systems within which kinds are arranged for our use. They are categorical arrangements that may have underlying ontic characteristics – thus the periodic table itself is an artefactual kind giving a representation of the set of kinds that qualify as natural elements and of other artefactual



kinds representing the trans-Uranic elements that depend upon man's artifice to create – but the scheme itself is epistemic in its characteristics. The periodic table proved highly generative, indicating the characteristics of potential, yet at the time, undiscovered elements. The question here is, therefore, what human purpose is served by arranging abstract institutional phenomena in these classification systems ? and how is it that they are of use to us ?

To understand this it will help, first, to examine the nature of the classification schemes we actually encounter and how we use them. There are different types of classification systems that one is likely to encounter in organisation and management science, which are here illustrated in particular with regard to the field of business strategy. A classification scheme is an epistemic tool, and reasons for making such classifications can be multiple and mixed. For the purposes of this thesis, a distinction is made between four notional types of classification system. These are:- 'motivated kinds', of various sorts; a 'nomenclature'; a classification 'heuristic'; and a 'sorting device'. But, note that this is a typology of underlying natures of the classifications ~ actual classifications schemes one encounters are seldom unambiguously of one type alone. Their natures and purposes are not mutually exclusive.

### 3.1 Type A:- Motivated Kind.

In this typology a motivated kind classification system is some structure of categories where the distinguishing factors in the classification of entities in the field are based upon some postulated determining force(s) that are 'external' or superordinate to the interests of the classifier, be they supernatural, or powers of nature or society, or some mixture thereof. The classes are 'motivated' by something that we believe is responsible and is additional to a simple current interest in producing some convenient groupings. This something causes the kind to be what it is, irrespective of whether we can specify the causal mechanism(s) in question. There is, in other words, an imputation here that some teleological purpose or 'essence' (broadly construed) underlies the classification. The principle or distinction concerned applies across the whole field or domain being classified. The copious literature on 'kindhood', especially that discussing natural or historical kinds, largely refers to this type. There are claimed or assumed ontological grounds attributed for the designation of the kind, whether or not the

motivational device is expressly set out. There are also strong epistemic grounds for raising the classification from a mere nomenclature or heuristic (as explicated below), by explicit or implicit appeal to those motivational grounds.

To qualify as a motivated kind classification system, as the term is used here, there must be some knowledge (and this includes widely held naïve belief, or narrowly held but authoritative belief) of grounds for the motivational basis of the classification (and this includes ‘the will of God’, entrenched tradition, respected authority, or the esoteric mathematical creations of sub-atomic physicists). This is a somewhat different take on the philosophy of natural kinds in so far that the distinction there is generally ontic, whereas here it is epistemic. It lies in the claim. Whatever the basis of the belief in its motivation, this is a ‘natural’ or ‘scientific’ or ‘principled’ or even ‘sanctified’ sorting; where the determinants of the distinguishing features are held by us to originate in elements exterior to the classification and superior to mere human convenience. Note that there is no requirement that the class determining criteria are manifest and, in fact, they are frequently only ascertained by means of some sort of instrumentation. Scientific instruments such as a microscope or the large hydron collider are obvious; but sales data and opinion polls would also qualify as sources of sortals. Such classification systems can apply to the full range of kinds ~ natural, historical, artefactual, institutional, concrete or abstract, or mixtures thereof. So powerful in the natural sciences, the idea that an adopted classification scheme within the conventional wisdom of any academic discipline is ‘motivated’ in the sense outlined here has proved an often unacknowledged underlying reificative force in the use of many classification schemes. This is despite the fact that other types of scheme, as laid out below, more properly reflect their nature. Motivated kinds are frequently the default interpretation of all classification schemes. We assume motivation, even when none is claimed; psychological essentialism at work.

### 3.1 B Types of motivation ~ ‘alethic scepticism’

There is a school of thought in the philosophy of truth and logic that is associated with ‘alethic pluralism’ (Lynch, 2004, 2008). It rejects a monist view of the truth in favour of a pluralist position that holds that there is more than a single way in which a proposition about how the world is may be true. That is a position regarding

ontology and truth. The argument here, however, is an epistemic one that observes that there are a number of ways in which our categorisations of the world can be framed and that a motivated kind classification scheme must, in order to qualify as such, be ascribed to some non-trivial ontological position. But is itself uncommitted, or agnostic, as to the warrantedness of such a belief. It brackets off ontological arguments regarding the nature and validity of the correspondence of theory with experience in favour of a permissive position termed here ‘alethic scepticism’. It is a pluralism about classification as a subjective functional truth that allows for variation of world view. But it also holds that there is a real world to be true about. That rules in both positivism and critical realism (as regards *motivated* kinds only). However, the usual construal of positivism is of a single, eternal and universal ‘truth’; a belief derived, perhaps, from essentialism and, by implication, from positivist methodology. Whilst critical realism (see below), especially as regards social realities, is more tolerant of a concurrent set of powers, tendencies and structures as being causal in open (social) systems. The ontology that critical realism traces is not necessarily eternal and universal. The essentialism to which it commits is spatio-temporally determined by the interplay of social reality. It is, thus, more amenable to an alethic sceptical position as regards which of any such causal factors is paramount in any given context.

Thus, under an alethic sceptical position where, say, a stratification of society into a caste system is concerned it acknowledges, without value judgement, that it exists as a causally efficacious classification scheme in certain societies. Now, to some individuals, or groups, caste is a hereditary station acquired as a birthright, whilst to others it is an unwarranted social imposition. The rival construals are about whether the social phenomenon is ‘motivated’, as outlined here, or not (Bowker & Star, 1999). Likewise, both evolution and creationism offer accounts of the origin of species and thus any biological classification scheme offered under either of these auspices is motivated in the sense employed here. In the first example (caste) we see the reflection of the essentialist v nominalist split found in much ‘emancipatory’ studies discourse. In the second, (species) we have two rival and deeply incommensurable essentialist accounts. The alethic scepticism adopted here seeks not to resolve such differences, more to make the claimed motivation behind them overt and, thus, amenable to scientific inquiry. The normative position regarding motivated kinds is that, whatever the claimed motivation, the basis for such a claim should explicitly accompany any

promulgated classification scheme and, potentially, be subject to conceptual and empirical investigation.

### 3.1.C. The range of potential strategy homologating agents.

If any social science, such as organisation and management science, is confronted with a claimed motivated kind as the basis of a promulgated classification scheme, it faces a dual challenge. One, is to examine the system for utility as a practically adequate means of partitioning the domain in question; i.e. as offering a satisfactory set of categories as regards identification (denotation), sorting and connotation (see Section 4 below). This is generally a scalar evaluation, not a binary pass / fail test, and it applies to any and all types of classification schemes. The second challenge applies to motivated kind classification schemes only. It is to establish the firmness of the ontological grounds for the claimed motivation; i.e. their relation or 'accommodation' to reality, as per Boyd (see Chapter 2.4.10). This second challenge confronts a stark and central problem in the social sciences ~ that of multiple competing and incommensurable paradigms or explanatory schemes as to why and how the categories identified in the promulgated scheme should exist independently of their identification by some scheme designer. Below are offered some examples of contending explanatory schemes within organisational and management science that could account for homogeneities in the phenomena that constitute the objects of our research and teaching. But first, it must be emphasised that a closer focus upon ontology is a *sine qua non* of our claims to be a (social) science in the first place. As argued in Chapter 1, rigorous exploration of our kinds is almost a paramount duty. A duty that, had it been addressed with as much rigour as other conceptual and methodological developments, should have resulted in greater progress.

Are there potential exogenous causal forces in the socio-technico-economic environment, or endogenous elements within businesses, that could potentially shape the natural variegation of companies and their strategies such that commonalities will emerge ? Forces that might be termed 'homologating agents'. This is an enormous question, (looked at in more depth in the relevant case studies), that can only be touched upon at present. But in effect there are intellectual paradigms within the organisation and management sciences from which motivation for similarity emerging from diversity

can be drawn. To explicate this, three overall ‘totalising’ paradigms are first outlined below – positivism; nominalism; and critical realism. The first and last of these would allow for motivated kinds in the social realm. Then, by way of illustration, some alternative intellectual frameworks are posited that could provide a more explicit account of similarity as being caused by forces outside the interests of the classifier.

A.) The positivist paradigm is a strong mainstream, almost orthodox, belief system in organisation and management science. It would hold that claimed homogeneities in structure and strategies reflected in a proposed classification system can be detected empirically within populations of organisations ~ a taxonomic approach (DeSarbo et al 2005). Any promulgated scheme can then be validated, often in probability terms, by means of instrumentation and empirical measurement in other populations. Such a paradigm rests upon a methodology modelled on a scientific ideal. The two major established business strategy classification schemes included in the case studies (Miles & Snow; Porter) have extensively been investigated in this vein. (Often to little effect).

B) There are also a number of adherents to alternative nominalist paradigms associated within some post-modernism in management science (Boje et al, 1996; Gephart, 1996; Gergen & Whitney, 1996; Grandy & Mills, 2004) that would deny the presence of anything other than social construction underlying *any* business strategy classification schemes. The question of motivation as described here is seen as mistaken and entirely superfluous to our needs. Motivations are entirely superficial and simply serve our interests; as such, the schemes may be more or less useful and can be evaluated in such terms. This meta-position also underlies the treatment of such schemes as being tractable to our various purposes such that they can be altered, conflated and applied in a promiscuous way. (Again, such treatment has been meted to our two main case study schemes.). There is a tendency for contemporary institutional sociology to adopt such approaches, e.g. Hsu et al 2010, (particularly Bogaert et al, 2010 and Kovács & Hannan, 2010).

C) Critical realism offers a third position (Ackroyd & Fleetwood, 2000; Danermark et al, 2002; Lawson, 2003; Sayer, 2000; Tsoukas, 2000). This account would explicate motivated kinds in the social sphere in terms of the intransitive causal

powers, tendencies and generative mechanisms and structures of society that provide that motivation and would still be operative as homologating agencies in the absence of any classification of the resulting homologies. They are real forces at work that cause the similarities and distinctions that are recognised in the categories and their arrangement in motivated business strategy classification schemes. Their investigation, however, cannot be conducted in the conventional positivist manner described above, since more than empirical regularity is at work, and our methods must take account of the different conditions of the social realm from that of the natural sciences (Bhaskar, 1979). The distinction against nominalist constructions is very largely ontological; that against positivism is both ontological and methodological.

This enquiry was designed to examine existing business strategy classification schemes, not to create new ones. However, this has been a fairly eclectic research quest and, in positing, as here, that there can be such a thing as a motivated kind of business strategy classification scheme, it is worthwhile briefly speculating from whence such claims for motivation might be traced. For either a positivist paradigm or critical realist account there are a number of potential frameworks against which a motivation could be ascribed i.e. different ways of theorising about causal mechanisms driving homologation. This is examined in specific contexts in the individual case studies. For the present, a handful of conceptual resources for motivation are sketched below in order to simply suggest that there is potential scope for generating a motivated type of business strategy scheme via a number of routes (alethic scepticism at work):-

i) The economics paradigm. Here mainstream microeconomics would provide an implicit motivation by determining economic forces in competitive markets that shape successful strategies such that, whilst there are different ways in which a strategy may operate, such variations are limited in scope and range (Besanko et al, 2007; Ricketts, 2002, Sawyer, 1979). Under the highly theoretic condition of perfect market competition there would be no such thing as strategic choice available to the suppliers to that market. As illustrated in this quote from a modern economics textbook:- *‘with few firms but easy entry and exit, the market is contestable and can have the properties of a competitive market: price equals marginal cost and strategic behaviour is irrelevant.’* Carlton & Perloff, 2005, p6. However, markets are seldom perfect, and never in the sense implied by theory. It is the normative processes, or stylised facts,

termed the ‘laws of demand and supply’ in less than perfect markets that offer a potential general framework for strategy classification. Hence an application of mainstream economic theory to strategy, such as that expounded by John Kay (1995) or John Mathews (2006), discusses strategy in terms of ‘rent seeking behaviour’ by firms seeking to exploit potential opportunities arising from departures from the theoretical ideal. A rudimentary basis for business strategy categories can be ‘read off’ some of Kay’s chapter headings. Of greater salience in this work is the fact that Michael Porter can be seen as the author/designer of a business strategy classification scheme that stems from conceptualisations formulated within an economics paradigm – that of industrial organisation (see Chapter 5).

ii) The social science paradigm. Here the modern mainstream would trace back to the seminal paper by DiMaggio & Powell (1983), albeit that they trace the origins of their thinking (and the paper’s title) to earlier writers. Whilst acknowledging the isomorphic tendencies created by (economic) markets, they account for the similarity of organisations with reference to state and professional (social) control and describe three isomorphic social processes:- coercive, mimetic and normative at work therein. Further, this paper establishes, from theoretical premises, two sets of predictors of the degree of isomorphism within a field, drawn from organisational- and field-level indicators. A well-known categorisation of strategic responses to institutional processes that emerges from this paradigm is Christine Oliver’s 1991 paper, in which she outlines five strategies, each with three tactical variants. This, however, hardly qualifies as a scheme offering a full approach to business strategy, and is more by way of a heuristic for strategic choice than an institutionally motivated kind. A further potential source of distinctions amongst organisational or business strategies, where this paradigm is foundational, is the sociology of institutional categories literature (Hsu et al, 2010) and the school of ‘institutional logics’ (Thornton & Ocasio, 2008), yet there is no significant generalised business strategy classification scheme based on either. (Albeit there is much in adjacent fields or discursive treatment of strategy / structure that could provide such a formal arrangement had the writers concerned regarded such a task as important.)

iii) The evolutionary analogy has provided three main strands of thought that might suggest motivation of foundations for a formal business strategy classification scheme:- (a) the work of Bill McKelvey (1975, 1979, 1982) advocating the application

of taxonomic methods derived from biological science in organisation and management science. McKelvey's contribution, although widely cited, has not resulted in significant business strategy classification schemes based thereon. However, the adoption of taxonomic methods and cluster analysis is evident in the work of DeSarbo et al (2005) and a discussion of this approach is provided in the Miles and Snow case study. (b) Population ecology; work conducted in organisational and management science associated with Hannan & Freeman (1977) and their collaborators and followers refers to the population ecology of organisations and draws upon an analogy between organisational growth and decline and that of organisms competing for environmental survival mechanisms or strategies. This is a perspective that sees a competitive social, economic and technical setting in which firms compete for resources and survival. It is a (market) environmental selection for organisations that best match its requirements. We have earlier discussed the parallels between business strategies and generalised biological survival strategies such as fleetness, camouflage, stealth, etc. There is here an implicit suggestion that organisations, despite their obvious disparities and different settings might, nonetheless, find a limited range of survival and growth strategies. However, to date, no major classification scheme of business strategies is based upon such a premise. And, finally, (c) the adaptive fit reading of the organisation / environment relationship. This is a similar notion to that of the population ecology regarding the continued survival and growth only of those firms that meet the needs of the environment; here largely the market's requirements. John Child's paper on adaptive fit (1972) is generally regarded as the starting point for further work on this topic. Under the organisational adaptation conceptualisation the emphasis, however, is upon the capacity of the organisation to adapt itself to the environment whilst also adapting or manipulating the environment to meet its needs. That is to say it recognises the significant capacity of organisations to choose and shape their environments, by branding, marketing, lobbying, standard setting, etc. Again a plausible basis for generalisation across firms and industries as regarding potential strategic groupings. In this case, it can be argued that the Miles and Snow typology (Chapter 4) owes something to such thinking and, it should be noted, they attribute one of the starting points of their own work to that of Child.

iv) The life cycle analogy: Here the growth and development of the firm or the market / industry is likened to the stages of growth of an organism. The process of



change, from small beginnings to growth and maturity to eventual decline of the organisation or the product market place is seen as a natural progression with strategies appropriate to each phase. L. Greiner (1972) is associated with depicting the five phases of growth of the organisation over time, and the consultancy Arthur D. Little is particularly associated with proposing a life cycle portfolio matrix of strategies appropriate to stages of industry maturity and the competitive position of the firm. The theory here being that there is a valid comparison to be drawn between organism and organisational life-cycles.

v) Globalisation rhetoric has carried through into a number of attempts to examine strategy. The best known model or structured categorisation being that of Bartlett and Ghoshal (1998) regarding the organisation for global operations on a four quadrant 'efficiency' and 'responsiveness' typology that employs idealisations and real world exemplars. There are a number of contemporary classification schemes promulgated in this area. These schemes would qualify for inclusion in our case studies, but have not been examined in detail since it was necessary to limit the scope of this study at this time.

There are then a number of plausible framework accounts within the field of organisational and management science to which causation of the similarities of business strategies highlighted therein might be attributed. An examination which, unfortunately, prompts a further question:- given this rich potential, why are so few motivated kinds postulated for this domain ? The tentative answer offered here is, that to date, 'kindfinding' has not been of particular concern to the research community, partly, perhaps, because other nomenclative and heuristic schemes offer simpler challenges to propose. For if promulgating a purported motivated kind there is an implicit obligation to at least state the proximate claimed homologating forces ~ the why ? of such kinds.

### 3.2 Type B:- Nomenclature.

A nomenclature, as used here, is simply a structured, agreed sorting and 'ordinary language' naming scheme within a field that may be based upon various principles or conventions concerning the appropriate classification. There is no explicit

claim to external motivation of the categories, no identified homologating forces at work; albeit there may well be some overarching ontology relating to how the world or society 'just is' and the similarities that are being recognised came about. Categorisation depends upon superficial similarities as they appear to the classifiers. There are no hidden motivational forces or essences directly implicated in the similarities being acknowledged in the scheme, yet there is an assumption that these are natural phenomena that are being recognised in the scheme. It is a scheme that recognises a salient similarity, whether of appearance, composition or behaviour and puts a name to that reoccurring something. The salience is in usefulness.

This is a nominal classification system that serves some human purpose. The class determining criteria are usually easily discerned and intensions and extensions are learned as language is acquired from infancy, or through enculturation, or occupational practice and training. It is an unreflective partitioning of environmental phenomena in that it divides entities or concepts on the basis of 'how things are' rather than 'why things are like that'. (It is, for example, the argument that permits cucumbers to be classed as vegetables or gnocchi to be included with the pasta [Harré, 2002a]). Whilst it is a pre-scientific or natural classification, such nomenclatures can be robust to subsequent knowledge gained through experiment and theorising. They can also be the product and property of a practice community such as gardeners or fishermen and be of great standing, utility and relevance to that community. (Medin & Atran, 1999). This such that the usage becomes that of that language community in general. The point here about utility, and to anticipate section 4 below, is perhaps best understood via John Dupré's argument in the paper 'Are whales fish?'. As a scientific classification, of course not. But, from a practical viewpoint, if the only knowledge we have of what class of thing a whale is, is that it is a mammal, the entirely natural assumption is that, in all likelihood, a whale is a land animal and has four legs. The scientific classification (which Dupré acknowledges is now predominant) is a less helpful cue that only indicates how it feeds its young. Although scientific practice seeks and privileges motivated kinds, it should also be recognised that sciences will settle for nomenclatures in their absence: the classifications of clouds and winds by Luke Howard and Captain Francis Beaufort contributed greatly to the science of meteorology, but both are nomenclative by nature (Hamblyn, 2001).

Sometimes referred to as a 'folksonomy', 'folk sorting' or 'folk taxonomy', the role and identity of an author / designer is often obscured by the passage of time (Howard and Beaufort mentioned above being rather untypical). Knowing the names and arrangements of things is the product of language acquisition at all stages, but for a motivated kind we can also learn why such arrangements are appropriate. Nomenclative classification schemes may prove the precursor to a motivated kind classification where more formal, scientific knowledge subsequently reveals the sorting criteria to have been grounded on ontologically firm foundations. However, as mentioned above, Dupré, for example, does not regard such nomenclatures in biology as inferior to the scientific (motivated) classifications in the same domain (Dupré, 1999). In empirical studies it has been shown that the grasp by young children of living kinds and their biological nature or the sorting of trees or fish by native societies often proves well-founded for practical use, and more appropriate to the language community concerned (Ahn et al, 2001; Coley et al, 1999). Likewise, there may be a number of sequential attempts to classify natural or social phenomena with seeming ontologically motivated groundings, each superseded by the growth of knowledge. As mentioned earlier, there is a tendency to impute a motivated kind where a nomenclative classification is, in fact, what we are dealing with (Medin & Ortony, 1989). But this is not entirely unjustified, since it is also true that many of our contemporary scientific classification schemes of the motivated kind were foreshadowed by their nomenclative forerunners. Scientific progress has been achieved in establishing the underlying causal forces that produce the evident homologies noted by our forefathers. (A position not truly achieved in the business strategy classification schemes that form our case studies).

Remaining, however, as a nominal classification system, it is an epistemic, social phenomenon, being the relevant community's way of naming things, or groups of things, or of dividing up the variety of entities judged to fall within the relevant domain. It distinguishes permanent from temporary characteristics and bases the sorting upon the former. It is certainly conventional, and the determinants of the sorting may well lack any motivating force(s) within the classified; the determining interests being those of the classifier's community. Unlike a motivated kind based structure, there is seldom a single, or even identifiable author / designer of a nomenclature, the origins of the scheme of things being lost in the mists of time. But such classification systems survive and can thrive when found useful i.e. they are a meaningful sorting of the world of

things or thoughts. In the social abstract realm the class determining principle may be identified without being specified: as in 'rich' or 'poor' which is clearly contingent upon time, place and context. As is evidenced in discussions of absolute and relative poverty and the calibration thereof. The application of such a nominal classification to a particular context then being set by application of selected criteria appropriate to that context. In other words, the user specifies the terms of the investigation / discussion.

The closest to a nomenclature of strategies was that offered by Henry Mintzberg (1988) and explicated here in full in the subsequent case study. Mintzberg had reviewed a number of strategy classification schemes and, to some extent, incorporated these in his own proposals within a specification of the scope for choice along each of certain strategic dimensions. The resulting list of 48 different categories of strategy has singularly failed to resonate with the strategy community and has been virtually ignored as a framework in strategy research. It is categorised here as a nomenclative scheme in the absence of any claim to some such external motivating 'fitness' of his scheme. But it is also clearly an attempt to provide a widespread community of practice with an authoritative, enduring, structured and inclusive framework for analysing strategic behaviour. That is to say, it is less than a motivated kind, but aspired to be much more than a heuristic or sorting device.

### 3.3 Type C:- A Heuristic Classification Scheme.

By a heuristic classification scheme is meant a system of sorting entities within a field that appeals to our specific cognitive requirements at that time. It is a 'folk sorting', like a nomenclature, but the purpose rests upon a sorting of things aimed at making decisions or judgements concerning them easier to make. Instead of the classification being based upon 'how things are', it is based on 'how we can group things in order to....' The usual purpose of classification is recognition first, and any inferences follow thereafter. However, in a heuristic the classification is driven by the desire to make inferential judgements and the ease of recognition of the appropriate category may be compromised by that need to see through the classification to its implications. Unlike a nomenclature, there is no need to distinguish permanent from temporary features; but like a nomenclature, the firmer the classification's ontological and epistemic grounding the greater its power. This form of heuristic classification is

closely allied to decision-making processes, since that is their prime purpose (Gigerenzer & Todd, 1999) and may work towards that end by listing schematically all the available options / categories and eliminating the least favoured / likely (Berretty et al, 1999). The argument here is that of ‘ecological rationality’ ~ that the methods or models reflected in the categorisation scheme must fit the purpose, rather than the field being restructured to fit the method. But there must be adequate search criteria for defining the area or field in question ~ the ‘decision arena’ ~ and rules for starting and stopping the categorisation and decision process. We all experience something of the advantages and frustrations of heuristic classification when dealing with the ubiquitous automated telephone lines of most service organisations these days. (‘If you are an existing customer, press one. If you are.....’).

Not all heuristics are classifications, but some classifications are for heuristic purposes. They are what Gigerenzer and Todd (1999) termed ‘ecologically rational’ in that they are fitted to the task, not driven by some principle or constraining methodology. They are helpful where the problem, like many in management, is one of uncertainty, rather than risk. In organisation and management science, for example, investment appraisal often entails the division of probable future events and outcomes as either ‘costs’ or ‘benefits’ and provides mechanisms for quantification and comparison ~ the heuristic is a procedure. In a similar vein, the typical ‘SWOT analysis’ is a bespoke heuristic classification of the external environment and internal resources and capabilities of an organisation. Like a nomenclature, it is spatio-temporally contextualised, but here the context is the purpose of the heuristic ~ the determination of the affordances and restraints upon possible courses of action. It is indubitably subjectively created and bespoke to the current context both of the firm’s position and the nature of the question being examined. Yet it does so without limit to the number of factors to be considered and without a requirement for some common denominator. (Yet, interestingly, this does not stop less enlightened students from downloading a vintage SWOT analysis from the internet as being ‘the’ SWOT analysis of the company concerned). SWOT is employed in strategic analysis, but is not itself a strategy classification scheme.

There are familiar such classification schemes in strategy, often represented via a four box matrix such as the Ansoff matrix (Ansoff, 1965). In that this is a well known

heuristic classification schemes it illustrates the concept. But, it also contains significant nomenclative elements and has become somewhat reified, hence, it is not ideal as an exemplar. A more or less ideal strategy classification heuristic type is provided in the strategic choices suggested by what has been variously described as the ‘Customer Matrix’ (Bowman, 1991; Faulkner & Bowman 1995; Faulkner & Johnson 1992). This scheme (described in Appendix 4) simply sets out two dimensions – price and quality – and a choice of three positions on each – thus providing a set of nine price / quality option conceptualisations and associated labels to facilitate discourse and decision-making. Although its adoption, directly or as the ‘strategy clock’, has fostered familiarity of this classification with many undergraduate students, it (like Mintzberg’s classification scheme) has little purchase with the academic research community and is, perhaps, more familiar to marketing practice. The difference between a heuristic and a nomenclative classification system might be found in the way that their use is framed:- in the deployment of a heuristic the framing is ‘let’s look at it this way’; whilst for that of the nomenclature it is ‘these are type x; whereas those are type y...etc.’ (where no explanation is advanced as to why the phenomena in question do segment in that manner).

### 3.4 Type D:- A Sorting Device.

Finally, a sorting device is how we label a classification system that lacks any pretence of motivation or naturalness or heuristic value, but is simply a convenience for the storage and retrieval of individual entities, whether of substance or information. It is merely a means of the placing and tracing of entities in the general scheme of things. The sorting can be personal and the selection criteria can vary arbitrarily from person to person; as in the way in which we elect to place non-fiction books upon our bookshelves (by author, subject, acquisition date, frequency of reference, size, colour, etc). However intersubjective or socially salient sorting classifications usually require some public key to the ‘system’ in use. For example the Library of Congress or Dewey Decimal Classification system used by many University and public libraries. As will be clearer in the light of the discussion in Section 4 below, the emphasis in a classification scheme of this type is upon denoting the individual entity and in sorting amongst individual categories i.e. determining boundaries. The intension is recall / retrieval and the extension is relative to some arbitrary convention(s) defined by, and of value to the

users. This is in contrast with the other three classification types where the associated connotations are of great interest in determining practical adequacy. A sorting device works well if it denotes and sorts well. The main connotations being merely those associated with storage and retrieval.

In business and organisational life such systems for data storage, retrieval and transfer are ubiquitous, consume considerable effort in design and implementation, yet are seldom remarked upon. For example, filing of suppliers' records in alphabetic order is a purely nominal classification that fits the sorting device description, but so too does the Dewey Decimal system. Much of the management science literature related to classification is associated with 'knowledge management' and relates to what, in effect, is reducible to sorting devices, but devices with polyvalent tabs enabling data retrieval according to many different applications. A sorting device does not rely upon any external phenomenon other than the property upon which the sorting is executed. Alphabetic order, date order, size, or any other relatively easily discernable feature of the entities being classified will suffice as long as it is acknowledged and agreed upon. Sometimes the 'key' is external, such as the Melvil Dewey's library index handbook(s) with the hierarchical framework of ten main classes and structured sub-divisions arranged in a standardised decimal notation. However, there is often an underlying, utilitarian folk logic to the arrangement of like with like ~ we don't look for a book on chemical engineering in the history section, but when we spot 'mechanical engineering' we are inclined to search nearby. (With the implicit brave assumption that any librarian will recognise and denote the subject matter of a book in the same unambiguous manner as implied by the system and our personal interpretation thereof). Albeit innocent-seeming, a social sorting device applied to individual persons (e.g. gender, schooling, post code) can carry enormous consequences. As Bowker and Star (1999) remark, such standardised classification systems provide an infrastructure of organisational or even national or international knowledge which is also often an unrecognised source of social, political and economic framing of capability or thought. (Where, however, such a classification is instrumental for social categorisation, it may be more appropriate to consider it as a heuristic device.)

Whilst personal sorting systems for business strategy (often based upon personal organisational experience) are undoubtedly salient in strategy discourse, ~ 'like we did

at .....’ ~, this creates a local scheme within a restricted community. There are no common place business strategy sorting devices. (Or at least those which might be seen as such also make, at the very least implicit, claim to some ‘higher’ type of A-C above). This is not surprising, given the abstract collective intentionality that is business strategy. There is literally nothing to sort other than the physical filing of the five year plan, next year’s budget or the new mission statement or other document within which the strategy is reproduced.

### 3.5 A caution ~ The principle of non-exclusivity.

As stated earlier, these are not mutually exclusive types. A feature of many typologies in the field of abstractions applies with some force here – that few such entities fit unambiguously into a single type alone. These are overlapping circles in a Venn diagram. There are no sharp dividing lines and most classifications fit more than one of the types to varying degrees. The nature of a classification may be such that it combines aspects of all four and the terms suggested above are reasonably fuzzy at the edges. For example, the periodic table of the elements qualifies as a representation of a motivated kind, but, at the outset, it provided a structured nomenclature for epistemic communities that did not have understanding of, nor access to means of determining, atomic structure. It also provides a guide to the properties of elements in particular vertical and horizontal relations to one another in that table, the whole thing acting as a heuristic. And, finally, the periodic table is simply a sorting device ordering the elements by atomic weight.

The fact that classification schemes may embody more than one type can also be explored with regard to the International Classification of Diseases (Bowker and Star, 1999). This is the internationally agreed set of accepted causes of mortality and associated classification codes used globally in death certificates. The ICD has a host of users ~ epidemiologists, public health workers, actuaries, the pharmaceutical industry, hospital administrators, etc. and, thus serves as an infrastructure to a wide section of society. It also organises on at least four non-exclusive principles:- topographical; etiological; operational and ethical-political. It contains etiological elements which supply motivated kinds; it provides a structured and standardised nomenclature; it is used for heuristic purposes, for example by insurance companies and Governments;



and, as a sorting device, it enables the important function of retrospective interrogation for emergent diseases.

### 3.6 A hierarchy ~ The principle of elevation.

However, it would be a disservice to the import of the periodic table to refer to it as anything other than a motivated kind. One instinctively elevates the impartiality and durability of a motivated classification over a nomenclature or a heuristic classification and all three seem superior to a mere sorting device. The reason(s) for this lie in the uses to which we wish to put the classification scheme. The most challenging aspect of strategy is that it involves prediction and the categorisation most likely to yield reliable inferences about an uncertain future is that founded on a motivated kind. Likewise an ‘alphabetic order’ sorting device is unlikely to claim high heuristic value, nor to be motivated by some higher force. As a first approximation, one can state that the higher classification is more likely to serve the purposes of the lower, not vice versa. Thus, where it is plausible to claim a classification system as being of a motivated kind that would be the appropriate description. A nomenclature is generally derived from some salient discernable that may serve for heuristic purposes too. Failing other more pressing needs, a heuristic may provide a suitable sorting device. This choice of the ‘higher’ of the classifications is termed here ‘the principle of elevation’ on the basis, explicated further in Sections 4-6 below, that it carries the greater pragmatic potency as an inferential mechanism. Dupré, who argues that some folksonomies are of equal value to formal scientific classification schemes to some sectors of society, would be uncomfortable with the implication of a hierarchy of classification schemes, as would this author, provided they are of equal pragmatic value. However, the argument here is that – as will be argued in sections 4-6 below – in principle, a motivated kind is likely to offer a stronger basis for drawing valuable inferences than is a nomenclature since, in terms of Boyd’s accommodation thesis, it is better matched to the real causal homologating forces in play.

In business strategy the Customer Matrix / Strategy Clock that emerges from Cliff Bowman’s work was described above as a heuristic classification scheme. However, Cliff Bowman’s own presentation (see appendix 4) is as if the scheme arises from empirical research – a putative motivated kind – and it is offered for pedagogic

purposes more as a nomenclature in Exploring Corporate Strategy (Johnson, Scholes & Whittington, 2008). Its designation as a heuristic classification scheme is entirely this author's usage. To this writer, the classification on offer here is either as a heuristic; setting out the logical permutations of increase – hold – decrease against two dimensions of price and quality with accompanying commentary on likely consequences. Or it is simply a sorting device. Under the principle of elevation it is given as a heuristic classification since the sorting aids decision-making.

### 3.7 A relation ~ Linguistic embeddedness.

As described earlier, strategising is acting under a description and a business strategy classification scheme is a structure of categories or descriptions, with associated labels offering a menu of possible strategies as broad generalisations. As described there, our classification schemes provide intersubjectively shared meanings together with their connotative associations. But the different types of classification scheme act differently.

A nomenclature is by definition about what we call things and how we recognise them as different from other things (concrete or abstract). But language and its comprehension is also inextricably bound up with two of the other three systems. Established nomenclatures are irreducibly intersubjective i.e. are collectively owned and modified within a language community. Heuristic schemes may be personal, but are more generally communally held and learned via enculturation. A motivated kind is generally recognised by properties, whether physical or conceptual, that are discernable to all. But many natural kinds are, thanks to the progress in scientific instrumentation, determined in ways that cannot be naturally determined via the unaugmented senses. Furthermore, the nature and modes of operation of some artefacts and social kinds may be well beyond the comprehension of all but a minority of experts. We come to understand such kinds via third parties; what Putnam (1975) refers to as the 'division of linguistic labour' and Collins and Evans (2007) refer to as the movement up the ladder of expertise to 'interactional expertise' where there is sufficient understanding to communicate without the practical, often tacit, expertise to contribute. That is most of us, other than experts, accept the presence of the determining motivational power(s) in the natural kind as a matter of trust. (Not so strange, when one recognises that almost all

linguistic acquisition, from childhood to professional education is taken on trust). Thus, it is found (see also section 5.2 below) that many classification systems are seen as natural and reflecting the way things are, without question. Only when challenged do we acknowledge the human origins of such classification practices and terminology. (Bowker & Star, 1999).

#### 4 WHAT CONSTITUTES A 'GOOD' CLASSIFICATION SCHEME ?

From the above treatment it is apparent that the value judgement being applied here is the usefulness of a classification system to society and the individual. It is not focused upon ontological issues, but upon epistemic usefulness. A classification scheme by this pragmatic account is a conceptual arrangement of categories as a tool for doing some kind of work. So what, then, must such a classification scheme accomplish ?

##### 4.1 A specification.

In the terms of this thesis, a pragmatic classification (motivated kind, nomenclature, heuristic or sorting device) is one that effectively and reliably achieves some human purpose in grouping phenomena, and to do this it must provide three features:-

- A) It must be successful in **denoting** the phenomena that comprise the class; – the class label must attach to something (whether tangible or conceptual) recognisable to the language community concerned;
- B) One way or another, it must point to recognisable differences in distinguishing those phenomena from others that fall outside the class i.e. it has effective associated means of **sorting**, and;
- C) It must be useful in **connoting**, or inference-making; – the connotations or wider intensions associated with the class must provide some meaningful service to the language community that deploys the label.

The claim here is that the distinction between denotation and connotation drawn in the above description is crucial to grasping the usefulness of any classification. While effective sorting determines its reliability in that use. This focus upon usefulness is, perhaps, somewhat different in emphasis to much that has gone before as regards the philosophy of kindhood (Chapter 2). There the key concern of the many different contributions has been whether the justification for the classification was indifferent to or dependent upon the classifier's intentionality. The discussion was about the extent to which the various kinds are the product of nature or society at large and their claimed validity against objective criteria, irrespective of subjective interests. (Note that the definition given above carries no explicit or implicit reference to essences, natural kinds or nature's joints). Here, the focus is very much upon utility ~ what meanings does the category label carry for us and how relevant are they to our everyday or specialist concerns ? Note that the four types of classification given in section 2 above ~ motivated kinds, nomenclatures, heuristics and sorting devices ~ all serve human interests. The key to that utility is the classification's use in cognition, and that depends upon its successful denotation, effective sorting and the 'carrier load' of relevant connotation achieved by the classification. These issues are therefore the first step in the analysis of classification offered here.

#### 4.2 Denoting.

The first task that the classification must achieve is to successfully indicate the individuals or concepts to which it applies: denotation. This is the task of attaching linguistic labels to phenomena of interest and being able to use that label or word correctly. And to do so in such a way that one will recognise the same phenomena on further encounter and collate separate encounters into a richer, deeper characterisation.

One might expect this to be untroubling, because it seems so natural, but a moment's reflection brings to mind the fact that, as adults, we seldom in day to day activities encounter entirely new types of phenomena. When we do encounter such situations and where there is some personal need to make sense of the novelty, the cognitive task is quite appreciable; whether it be grasping the meaning of Bourdieu's 'habitus', or first coming to grips with a menu in a Vietnamese restaurant, or integrating our conception of some newly encountered sub-atomic particle or understanding the

risks and returns from a novel financial derivative product. A concept of what is entailed in using a word correctly is having a mental structure associated with the word and that has to be constructed in such a way that future encounters will call to mind the same term. As Millikan declares, ‘the most central job of cognition is the exceedingly difficult task of reidentifying individuals, properties, kinds and so forth, through diverse media under diverse conditions.’ (Millikan, 2000, p ix). It is taxing. But the effort is easily forgotten, except perhaps by those concerned with pedagogy or semiotics.

The examples of ‘habitus’, the menu, particle or derivative cited above are all ones situated within one’s linguistic or epistemic community (or can be translated thereto, in the case of the menu); the phenomena or label is there, is supported with prior knowledge within that community and simply needs to be attached in one’s personal lexicon. As remarked, such encounters are infrequent. Situations in which there is no supporting cognitive structures or classification system are even more rare. But, one must ask, what if there is not already an existing set of labels or terms to select from ? What where there is no supporting structures or linguistic community to help ? This is the problem that Eco (2000) tackles through examination of encounters such as Aztecs with Spanish cavalry, or the curators of the British Museum with a stuffed specimen of a platypus.

Eco’s (2000) treatment of the distinction between the ‘dictionary’ definition of a class noun (the nuclear content or NC) and the ‘encyclopaedia’ entry under that label (the Molar Content, or MC) is quite subtle, and first, we have Eco’s Cognitive Type (CT); what he terms the private personal semiosis, as contrasted with the NC or public communicative consensus. In Eco’s words ‘The NC represents the way in which we try intersubjectively to make clear what features go to make up a CT’ (Eco, 2000, p 280). This CT is a label or term against which the manifold of the senses registers data concerning the phenomena. Whilst Eco refuses to explore the processes of cognition and recognition involved here, Millikan sees this as central to her work on substance concepts.

Millikan (2000) proposes a rather unique form of meaning externalism – not one in which the referred object, substance, concept or whatever initiates the perception prompts the reference, but one where the act of reference is provided as a sense of

direction to incoming information. Reference for Millikan, is the routing of sensory information – visual, audible, olfactory, etc and including language, all of which enters consciousness via different routes yet needs to be combined as all referencing the same external or non-embodied source. It means the joining up of incoming information in different modes of presentation on different occasions such that the brain represents to itself that these all relate to the same thing (object, property, concept ) – reidentification. She describes a number of accounts of what this entails, making it clear that there are still a range of competing theories. But, whatever the nature of this mental focal point, which is termed here a ‘label’ or CT, it, in fact, pre-exists language. It is really what we attach the label provided by language to. Thus, whilst his context may have been different, Strawson was correct in saying that referring is not something that words do – indicate phenomena – but what we do with words (Eco, 2000, p 280).

Once we have the label; ~ the CT; the point about which all new information can accrete;~ we are on the way to creating the (pre-scientific) dictionary definition, or narrow intension, of the class noun – the NC - and, simultaneously, the data file containing all that pertinent information ~ the MC ~ or what will become our personal encyclopaedia entry for it, the fully networked intension. As Eco points out, the creation of the public dictionary definition and public encyclopaedia entry is the next phase and is interactive with the language community / epistemic culture at large. But both Eco and Millikan are clear that there is no absolute reason why the personal and the public definitions / entries should be identical. In fact they are frequently different. The pre-scientific or ‘folk’ definition of water is of the nature of a colourless, more or less tasteless, yet thirst quenching natural liquid that falls as rain or flows as rivers. The scientific, and essentialist, definition is that of a natural kind; H<sub>2</sub>O.

Whilst the NC and the MC are simultaneously created, and mutually supportive, their functions are different. The NC defines the sorting or defining criteria to see if the phenomena conforms to the label; can be properly categorised in that class. Whilst the MC sets out the associations of that class label with properties wider than the defining criteria. The NC of a horse is that it is born of the union of a mare and a stallion – its essence is that of a historical kind. The MC tells us that a horse is an animal, a vertebrate, a mammal, hay eating, can be domesticated, can be ridden, etc. The

veterinary surgeon will have a different MC for a horse from a jockey's and both their MCs will be different from that of a child.

#### 4.3 Sorting

The act of re-identifying incoming information about some phenomena or concept is not just about recognising the same individual, substance or concept when re-encountered, but also, in classification, requires an act of recognition of similar individuals, substances or concepts as being of the same sort. It means being denoted together as under the same CT or label because they belong together as a group or are the same stuff or are the same concept. This also implies the ability to register other individuals, substances or concepts to be not of the same sort as those already in our current 'dictionary' of encountered things or ideas. So we need to both be able to sort things into different categories in our mental structures and, where necessary, to create new categories and integrate them with existing conceptual structures. In the grounding literature, these requirements relate to the 'extension' of a category – finding its domain of capture – or the question of 'sortals' as to how we count individual things as being of the same class or not and, furthermore, the basis upon which we divide up and assemble the classes within the cognitive world we inhabit.

Exactly how this is done when sorting things as individuals (recognised as 'count nouns' – things of which we can ask 'how many ?' such as tigers or competitors) or stuffs (recognised as 'mass nouns' – things where the question becomes 'how much ?' rather than 'how many ?' such as water or risk), is neither clear amongst philosophers, nor amongst cognitive scientists. So, we can pass over the mechanisms, but with the acknowledgement that humans are capable of performing this task far more effortlessly than we can understand or explicate exactly what it is we are doing (Grandy, 2007). In addition, it should be noted that society has proved adept at dividing up and recognising the social world and concepts thereof – as the abundance of motivated kinds and nomenclative and heuristic classifications in the field remind us.

However, the literature is less helpful when we move into areas such as concepts where 'similarity' can be so difficult to pin down. For example Bowker and Star's book (1999), is virtually silent on what, at a philosophical or cognitive level, sorting entails (it

being deemed self-evident) and directly tackles the challenging issue of the social significance and consequences of created formal classifications of diseases, nursing interventions, race, and so on. There the sorting is by means of formal, conscious, definitions which, of course, given the variety and plurality of *homo sapiens*, its diseases and its social life, prove procrustean and socially contentious. Thus Bowker and Star surface the ‘invisible categories’ that permeate society in the guise of the bureaucratic devices that we apply in deciding whether the individual is man or woman, black or white, sick or well, etc. They address some of the consequences of their ‘information infrastructures’ for individuals and society. In so doing they highlight the difficulties of classification in the social realm, but do little to ground the processes of how categorisations and their architectures arise from our mental processes.

Other than that, the successful classification system must propose a successful means of dividing those items within the domain that qualify for membership of the class from those items that do not ~ defining the extension. For this, the recognition criteria or the definition should provide some unique distinguishing features or ascertainables that can reliably be used to divide the field or segment nature. The easiest manner of so doing is to select the surface features of an object or the most easily discerned attribute(s) of a concept to apply as a sorting criteria. For physical objects the possibility of ostensive reference to an exemplar makes sorting less challenging than as for concepts with or without associated discernable physical characters. Some concepts, like being a veterinary surgeon, or a member of New Labour or ‘between 50 and 65 years old’ have some associated token signifying membership of the class – a Certificate on the surgery wall, a party membership card, a birth certificate, etc. For some, however, the absence of any physical discerning feature is highly problematic. This is the case with business strategies. The usual recourse is to some typification by example – the ostensive reference is another concept and its associated values – ‘like Ryanair or easyJet’ for a low cost airline. The problem, of course, is that typifications don’t come with established boundaries; begging the question ‘at what stage does my particular no longer fit the template?’ The problem is not one that this work seeks to resolve by means of some over-riding principle, other than the strong recommendation that accompanying any proposed classification scheme should be a specification of intended boundary conditions between categories.



But there is another feature of a successful classification scheme and that is that it successfully segments the whole field in an appropriate manner for a range of applications. Obviously a classification of ‘horse’ and ‘not horse’ hardly commends itself as a principle for dividing a whole field of large domesticated beasts, since the ‘not horse’ category contains such a potential miscellany of items – cows, deer, oxen, ostriches, large dogs, etc. Thus the extension of the CT to within-group membership also applies to the structure of CTs as group-wide definitions. The field of organisations can cover a range of sub-fields: the first divide being ‘for profit’ / ‘not for profit’; then, for, say, the ‘for profit’ group there is the goods / services distinction and below that the industry and below even that the sector therein. We thus can get a hierarchy top down of – Commercial (ie for profit); Airline (Service) No frills (sector) European short-haul (sub-group). Sorting, on this type of structure is like the pin ball machine in the fairground arcade, where the ball drops down through layers of pins to be deflected left or right to end up in a particular ‘win’ or ‘lose’ compartment – it is an algorithm that sorts our abstract entities into the appropriate category. However, this illustration may be an over-simplification, since a strategy is motivational cf. the simplified operational sorting suggested by the pin ball analogy.

#### 4.4 Connoting.

Connotations are associated properties and meanings entailed by the original denotation – if it is denoted as ‘horse’ all those things listed above are also connoted. The most obvious properties are the physical appearance and other sensory perceptions of the animal and its behaviour that cause the original reidentification and denoting as horse. The most obvious meanings associated with the denotation are those available from our accumulated mental file on horse – that if encountered in a field or wearing any tackle it is a domesticated animal; it will (probably) eat an apple offered to it; that it can (probably) be ridden. In addition to the connotations directly entailed by the denotation itself, it includes all those characteristics that arise from the position of ‘horse’ in our conceptual structures and knowledge hierarchies. Thus, biological knowledge tells one that it is a vertebrate, a mammal, and suckles its young; whilst linguistic knowledge tells one that the horse has parts such as ‘hooves’, ‘hocks’, ‘main’, ‘withers’ etc and the young are denoted ‘foals’; while social knowledge connotes that horses can be saddled, trained, raced, etc. In other words the denotation ‘horse’ carries

with it a mass of other information relating to ‘horsiness’ – the mass that Eco terms the MC - our encyclopaedia entry for ‘horse’.

The act of denoting brings into play all the potential knowledge that can be used to guide our actions and thoughts in relation to that denoted thing and other things it relates to. It is the trigger for the associated schemas and scripts described in Chapter 2. The NC calls up the relevant MC, or the wide intension, and its mass of connections to other entries in our total cognitive grasp of the world. It is a source now of inferences of the sort that say – if this is a domesticated horse, that there will be a house or stable nearby; it will have an owner; a name, etc. (These are less properties of horses than properties of people in relation to horses.) The list of potential inferences, the mental connections one could make are virtually numberless. And therein lies the power of classification schemes ~ the ability to draw inferences grounded in our total library of knowledge. Thus it is that a ‘good’ classification, as defined, enables us to go from dictionary to encyclopaedia to library. It brings all our relevant knowledge to bear. The innate human capacity to classify is vital, not simply in recognition, but lies in the ability to bring to bear wider cognition through making inferential connections. This is explored in the next section.

## 5 CLASSIFICATION AND INFERENCE.

At this point we come to see the power of classification in cognition and sense-making. It is key to living in the world and it is also the motivation for shaping our knowledge to meet our intentions of how to live in the world. Learning can be needs driven and this frequently means acquiring new concepts and fitting them into our mental structures and hierarchies. If my business competitor is a ‘defender’ or my strategy is to be a ‘cost leader’, the utility of the denotation comes from its connotations ~ the inferences about my competitor or about my functional priorities that I can draw from the designation.

### 5.1 Deduction, Induction, Abduction...and just making sense.

Deduction provides, not so much as an inference, as an entailed truth that follows from the truth of its premises. In the terms outlined above, provided that the

denotation and sorting are correct, (i.e. we have the right dictionary reference, or NC, and the acquired encyclopaedia entry, or MC, functions correctly) then the inferences that are possible are also reliable. The issue is not whether deductive inferences from our classifications are valid, but whether our classifications lend themselves to deductions via denotations that recognise motivated properties, sortings that are clear cut as to the extension of the category, and category structures and connections that facilitate relevant useful connotations. Deduction is the most reliable of all types of inference. On the other hand, it can be claimed that deduction merely rearranges our knowledge without adding to it. Whilst the ‘natural kinds’ that one might determine in the physical sciences may lend themselves to use in deductive inference, the social realm seldom provides such solid grounding in a stable motivation since such causal powers in society operate in open social systems (Elder-Vass, 2010). The interplay of tendencies and structures is in flux. There is, however, some potential to produce semi-permanent attributes, at least unless and until those causal powers are altered by other causal powers and social structures. Hence deductive inference is less potent in social classifications. (Ignoring the case of tautology such as being rich and having lots of money).

Induction is inferring the conclusion or rule from a series of repeated occurrences. But it is conjecture, rather than an entailed truth. For example, there is a generally reliable inference that can be drawn from our NC / MC where that inference relates to the correct reidentification of an entity (stuff, individual, concept) from a partial input of information. This is inductive denotation and is, for example, how we recognise any three dimensional object from a particular perspective. However, one is dealing with inductive probabilities, not deductive reliabilities. Other properties drawn from the MC are probable truths – like those relating to the domesticated horse mentioned earlier. They are appealed to by virtue of evidence of prior encounter or repute rather than logic and are subject to empirical falsification, but never empirical ‘proof’ other than statistical confidence. This ‘black swan’ problem (Taleb, 2007) is addressed in critical realist texts that discuss ‘tendencies’ rather than ‘laws’ and, notwithstanding the conditional nature of all inferences based upon inductions, the inferential power of many classifications can be powerful.

The third form of inferential thinking, abduction, is frequently the mode of reasoning or inferring deployed in social science research (Blaikie, 2000). Social scientific accounts can be generated from everyday accounts as a generalisation from experience. It is mere conjecture that seeks to explain two or more phenomena with a single general rule. But the reality is that we intuitively tend to select for the inferences those encyclopaedia entries, or MC properties, that are likely to yield robust conclusions. It can be likened to intuitive, rather than deductive or probabilistic reasoning. As, for example, when we draw upon generalisations about nature to consider the likely outcome of a particular case: As Eco points out the interpretation of signs is inescapably abductive – Fire causes smoke. I see smoke. So, there is a fire. – In all probability this conclusion is a good guess and a very reasonable inference, but it is not an unassailable one ~ or there would be panic at rock concerts whenever the dry ice is used. The clues of context add enormously to the nature and reliability of the abductive inferences we can draw.

Drawing all this together, we can add ‘sense-making’ to the list. This term, as used in management and organisation science, is generally associated with Karl Weick (1995), although it has a long history and wide currency in the social sciences. It refers to the task of making the occurrence of some phenomena intelligible via some plausible explanatory narrative. As regards classification, it embraces the notions of inferences from classifications and also the abduction of formal classes from informal ones ~ the move from nomenclatures to motivated kinds. Sense-making refers to the fact that our thinking processes are a mix of deductions, inductions and abductions based on the fact that the phenomena and sensations of life do not come with labels attached. Those labels were acquired in enculturation and as a member of an epistemic community. Those communities also elaborate and refine the classifications available to the community at large. The sense is made in our heads and shared. But it is also shaped by these intersubjectively held invisible infrastructural systems of classification.

## 5.2 Classification systems as inference structures.

In chapter 1, section 5, a formulation of kinds of kinds was set out which broke down kindhood into five ontologically distinct types (excluding the unintended). In this

chapter, section 3, the classification schemes found in contemporary organisational life were typified in a way which side-stepped the question of essentialism v nominalism which dominates contemporary discussion, in favour of a pragmatic view of what epistemic values are embedded in them. This typology being non-exclusive, hierarchical, and linguistically embedded. In section 4, the chapter also looked at what makes for a 'good' classification system in terms of its utility for denoting, sorting and connoting ~ its inferential prowess. In this current section these elements are drawn together in more formal terms. It asks the question 'how effective are such classifications as inference machines ?'

In the terms used here only one kind – the natural kind as described in Chapter 1 – is entirely homogeneous at the population level. Therefore an extrapolation based upon a single entity is as reliable as the identification is correct. For all other kinds populations may be similar and easily identified as such, but the individual entities (say tigers, or toasters or tailors) are slightly different one from another and extrapolation is less straightforward (Steel, 2008). Thus, the scientific method of closed experiment with assumptions of entirely homogeneous natural kinds proves an inappropriate model for historical and social kinds, with variability in both the population and interplay of the causal forces under enquiry. Yet, this failure of model application should not be taken to indicate that all inference and extrapolation in the kinds of the historical or social realm is doomed. It merely indicates that inferential validities and reliabilities are of variable strength and that care must be taken to explore the exact nature and provenance of the 'population' under study.

The claim is that a motivated institutional kind, whether concrete or abstract, can provide sound inferences; certainly as robust as the weaker forms of historical kinds. Thus establishing the further claim that the strict essentialism of the sort traditionally associated with natural kinds does not have to be endorsed for substantial cognitive gains to result from appropriate treatment of social kinds. This reformulation, it is hoped, will enable three changes in perception of social kinds:-

A. That, as well as the acknowledged subjective potency of social kinds and their interaction with their human subjects (Bowker & Star, 1999; Hacking, 1999), runs an objective capacity to sort social phenomena in such a way as to provide strong inductive potentials to the categories so produced.

B. It follows that the design and promulgation of social kinds merits greater attention and respect. To assume that nothing more than a nominal convenience is the best that can be achieved is to sell the social sciences short.

C. That the social sciences may reap benefit from paying closer attention to the kinds of kinds that figure in their ontology, epistemology and pedagogy in an attempt to build classification schemes that afford strong and useful inferential potential.

In the next two sections, 5.3 and 5.4, just two of the four classification types are examined in terms of their suitability for inferential sense-making. It is argued that these two ~ and indeed the others, nomenclatures and heuristic classifications ~ are of potential value as inference machines, and that whilst some have greater strengths than others, none can be dismissed as being of little utility to the social scientist.

### 5.3. Motivated kinds as inference machines.

‘Motivation’ is used here to indicate the presence of some claimed or implied external homologating force(s) or power(s) that result in similarity among phenomena. That certain homogeneities are caused, not accidental (Boyd, 1999b, 2010). This means that the set of inferences associated with its NC and MC will be universally potent in the relevant domain and spatio-temporally resilient. It also means that the necessary and sufficient recognition determining character(s) associated with the classification will be permanent as long as the motivating powers are unchanged. Thus, the deductions resulting from the correct designation (NC) will hold strong. However, as remarked upon above, a) such entailed truths add little to the sum of new knowledge (that comes mainly from induction and abduction) and b) by insisting that these entailed truths are

motivated, and not merely semantic, the search for falsification must involve questioning the causal powers or tendencies held to be operating. Whilst this may be unproblematic in some natural science, since some laws are enduring, it is entirely valid to suspect changes in the collective intentionality of human agents in the abstract institutional realm. We can change our minds, our strategies. Thus, the potency of deductive inference from motivated kind classifications in the social sciences is never guaranteed in a world of unstable motivation. However, some causal forces in the economic or social sphere are more enduring (say, the behaviour of competitive markets or the desire for status) than others (say, the availability of particular resources at a particular point in time or the fashionability of a particular product). Hence, to know about the reliability of inferences from motivated kinds in the management and organisational field, we need to understand the nature of that motivation. That includes its purported spatio-temporal reach.

Inductions and abductions from motivated classes are those that stem from its MC; the encyclopaedia entry and the extended network of cross-references associated with that category in that given relation to other classes in our mental structures. The inferential material drawn upon is that of the schemas associated with the concept and our underlying theories as to how the world works. In so far as it is possible to correctly identify (denote) and scope (sort) such kinds in the social sphere, the inferences drawn should be reasonably strong. The same caveats regarding stability as applied to deductions apply with equal, if not greater, force here.

#### 5.4 Sorting Devices as inference machines.

The power and relevance of the pragmatic approach to classification is, perhaps, best illustrated with reference to the lowest of our hierarchy of classification systems. Many would, presumably, dismiss a sorting device as offering a classification system of inferential potential. If the sortal were alphabetic order, this indeed might be warranted. But the sorting of competitors by size or nationality might offer a sorting and classification approach with considerable inferential potential since these are salient points to both the nature and scope of their likely strengths and weaknesses in the competitive struggle. Indeed it is nominal features such as these, plus other dimensions

such as product range, geographic spread, investment levels in R&D, brand strength, and the like that are frequently combined to determine ‘strategic groups’ of considerable inferential value in strategic analysis. What has happened is that the NC of the nominal classification has drawn upon the full MC and its associated network of properties in order to determine the categorisations that permit a rich set of inferences to be drawn. That is to say that predictions about strategic behaviour can reasonably be explored by means of what appears to be, at first glance, a simple structuring of information ~ where that structure grasps some salient causal mechanism(s).

Yet there is one respect in which a sorting device may be superior to a motivated kind when classifying in the social domain. The natural sciences generally deal with tangible or observable phenomena such that direct ostension is unproblematic. In the social sciences such ease of ostension may be absent, especially where an abstract concept such as ‘leadership’ or the collective intensionality of a management group such as a business strategy is involved. Reverting to an earlier terminology, finding ‘essences’ upon which to base our classifications of some motivated kind may prove elusive. On the other hand, the selection of some simple sorting device, although, nominal may prove more effective in denoting and sorting. Thus, classification by level of capital investment per unit of sales might prove of greater utility than searching for a ‘cost leadership’ strategy’s inner motivation. Sorting devices offer firm sortals in the face of a fuzzy reality. But note that the researcher’s substitution of a measured ratio for interpretations of interview notes, rests upon an implicit theory that such action is justified in context, i.e. in this case, that firms with higher levels of capital investment per unit of sales than their competitors are more likely to be pursuing a ‘cost leadership’ strategy.

Thus, the pragmatic view of classifications in organisation and management science is to regard them as structures that afford, to different degrees, inferential connotations that serve some purpose. That purpose being largely intersubjective clarity about intangible objects of interest and potential for interrogation that serves some instrumental purpose.



## 6 CLASSIFICATION AS THEORY (AGAIN).

As intimated above, and in Chapter 1, there is yet another important overlay to the understanding of classifications:- Insofar as a typology or taxonomy is a purposeful artefact created from theoretical concepts, it is itself the product of our theories as to how things are and how they are best arranged for our purposes. Where that purpose is in providing explanation and making inferences, Boyd's hypothesis is that classification systems work best where our classificatory practices are superimposed upon the real causal structures of the world and society.

### 6.1 Innate essentialism and implicit theories.

Our categories, whether acquired from infancy or naïve adult categorisation up to domain folksonomies and scientific expert terminology, tend to carve up the world according to our implicit or explicit theories regarding the nature of that world. Categories are, on this view, metaphysical reflections. This emerges most strongly, but indirectly, in Gelman's work in the 'theory theory' view advanced in her 2003 book, and in her data regarding people's perceptions of certain social biological categories. For example race and sexual orientation stereotypes that have no biological foundations, nonetheless tend markedly among the general population to be ascribed to illusory theoretical foundations in genetics. The point being that the theory does not need to be well-founded in order for it to command our attention in devising distinctions. Indeed the acceptance of the very notion of an 'essence placeholder' for some undetectable, unspecified and unknown true causal essence is a tribute to the intrinsic belief in some yet to be discovered theoretical explanation. This is particularly evident for the construal of certain social categories, seen as embedded in explanatory theories that may or may not have causal efficacy (Bowker & Star, 1999; Haslam et al, 2000). And it can be extended to our social (rather than functional) interactions with certain artefacts (Gelman, 2003; Harré, 2002b). It is evident in some of the case studies.

That theory imbues essentialism about categories is illustrated by the work of Diesendruck and Haber (2009) on seven and eleven year old Israeli school pupils. When divided into two groups – those with a secular education and those with a Jewish orthodox education - it was found that essentialism about specific social categories

(gender, race and ethnicity; but not social and economic status, nor animal kinds or artifacts) is facilitated by the particular cultural belief of creationism. Leading to the conclusion that *‘while children might be intuitively disposed to essentialise human kinds, the specific kinds in their social environment onto whom they eventually deploy this essentialist disposition is determined by cultural input.’* (Diesendruck & Haber, 2009, p 111).

That classifications reflect our metaphysical positions in general is also taken up in the philosophical literature. First, as Dummett, writing in the 1970s, is paraphrased in Thomasson (2009); without some association to a category concept we would be unable to single out any objects at all, even to use names or demonstratives in a meaningful manner. So, categorical concepts are necessary for us to single out ‘things’ at all and we cannot derive ‘things’ without regard to an armoury of categories. Further, this extends to abstract institutional kinds (Thomasson, 2003) and to the performative social discourse that creates them (Sayer, 1997). Moving beyond experimental psychology and the philosophy of kinds to a more general approach, there are many who have looked at our classifications and concluded that they are greatly influenced by our theories of the world in general.

## 6.2 Classifications as theories in the social sciences.

The main advocate of seeing classification as theory made manifest is Paul Davidson Reynolds. Dealing with theory construction in the natural and social sciences, (Reynolds, 1971) recognised that a typology or a taxonomy is a means of organising and classifying phenomena that entails some underlying theory as to what will be useful. As reported in Chapter 1, Reynolds, further, argues that all substantial, scientific knowledge of a theoretical nature is derived from sets of statements organised so as to constitute that theory. Whenever we use any classification scheme for the structuring of our knowledge-building and sense-making, there is an implicit theory behind its deployment ~ a theory that says this is how the world is, or at least should be regarded for our current purposes.

Bowker & Star, 1999, under a general description of the ‘Janus face’ of classifications, point out that it is important to know not only what is coded by our

classifications, but also what is ignored in the coding. What is left out. They discuss this under what they term 'Spinoza's problem':- it appears that we could classify things (especially in the social world) any way we like; but won't know which way to do it without some theory of what is the important salience. However, we won't know what is important until we have sorted things in some way. We need the theory in order to set up the categories in the first place. Perhaps 'Spinoza's paradox' might be more apt. Moreover, the central thrust motivating some of the classification systems that they examine, particularly that of nursing interventions, is the theory that providing a classification surfaces what would otherwise be hidden. They are seen as revelatory in the same sense as looking through a microscope is revelatory.

This general line is picked up in the management and organisational science literature in Doty and Glick (1994), who argue that typologies, when properly developed, are a theory that can be subject to rigorous empirical test. Those that are not falsified can, therefore, be used for prediction. (They also observe that few typologies in the field are properly developed and fully specified). On the other hand, McKelvey (1975), observes the failure of organisational science to develop a widely accepted and usable classification scheme and stresses the importance of such schemes to the development of any scientific body of knowledge. In this paper, as in his 1982 book, he argues for the use of statistical methods to develop classifications based upon taxonomic techniques, keeping the empirical categories free from prior theory or classification structures. However, in so doing, he acknowledges how difficult it is to gather data so raw as to be free of prior conceptions, and, having critiqued two major empirical attempts at so doing, concludes that neither has come close to being theory-free. Whilst Pinder and Moore (1979), responding in part to McKelvey, observe that it is difficult, if not impossible, to avoid prior theory. They point to the theory-laden content of McKelvey's own work and to the unavoidable necessity of the researcher to provide some conceptual frame for any statistical analysis.

## 7 THE ARGUMENT FORESHADOWED

These ideas are only sketched out here, but (anticipating the results of the empirical studies of particular business strategy classifications) it is suggested that this pluralistic, pragmatic and epistemic view of classification in the social sciences offers a

more promising line of approach to the material than that pursued in the field to date. It is a view that values classification in particular as an indispensable ‘inference engine’ in management science. One that has been largely passed over in terms of formal recognition. Four points in particular stand out:-

### 7.1 Combining and compromising with multifaceted classifications.

Prompted, perhaps, by the emphasis upon the propriety of a particular classification schema as found in the natural sciences (see, for example, the contention within biology over the ‘true’ nature of species), there is a tendency to discuss classification in the social sciences as an either / or dichotomy. This seems an unnecessarily procrustean view. The four non-mutually exclusive types of classification adumbrated above offer an alternative, fruitful perspective. One where one can look to the combination of types and their associated virtues. This does not resile from the view that motivated kinds are superior where they can be found (as per 7.2 below). Nor, however, does it argue that a theoretically grounded but impractical scheme is superior to any other.

Best can be enemy to good. Arguably, even a nominal scheme that lacks even the weaker form of motivation found in the social realm, but scores well otherwise, is the superior. Trade offs, rather than elusive purity, seem more in accord with the usual circumstances of social classifications. Classifications of social phenomena, such as business strategy, can be proposed and deployed even where the underpinning theory is intuitive, weak or undisclosed. In so doing, some satisfactory outcomes, both cognitive and functional, may well result. The equivalence in the discussion above is a nomenclature, or folk taxonomy, that enables us, and our organisations, to function in that sphere and it need no more concern us why the classification happens to serve our purposes any more than it does a child to be concerned with why a tiger is a cat.

### 7.2 Keep looking for motivated kinds in management science.

From what is said above, however, it is also clear that the concepts and categories we deal with in management and organisational science are ‘better’, i.e. more

useful in making inferences, when and where they are grounded in some ‘motivation’. In the social sciences, this epistemic essentialism largely concerns the motivational effects of social structures and causal powers upon individuals and organisations (which both represent historical kinds, individual agency and collective intentionality). This observation rests upon a broadly social constructivist and critical realist framework as regards to the ontological status of social phenomena. See for example the works of, Danermark, 2002; Elder-Vasss, 2010; Hacking, 1999; Lawson, 2003; Sayer 2000; and Searle, 1999. As described above re Porter’s generic strategy, motivation for strategy kinds may be found in such exogenous economic forces within society. Whilst another well-known strategy classification, the Miles and Snow typology (1978), is claimed to arise from the interplay of endogenous organisational forces in their little-researched ‘adaptive cycle’. These two business strategy classifications are explored in depth later in this work. Other possible exogenous or endogenous motivation or homolgating mechanisms were described above in Section 3.1 C (i.e. economics, sociology, evolution, globalisation).

So, as the pragmatic criteria moves from use-in-practice to theory-in-practice, it changes from ‘does it work ?’ to ‘do I/we understand it and its causation ?’ which, of course, leads on to the questions, ‘can we rely upon it ?’ and ‘what else does potentially it do ?’. Any serious academic research on such classifications must focus upon those motivations that cause the manifestation(s) which had been the basis of an initial nomenaclative classification. In other words it must progress from a folk taxonomy to a scientific taxonomy. It is those sciences which have achieved robustly grounded concepts and classes that have made the most progress. It is particularly in those natural sciences where the domain’s natural kinds are well-characterised and understood that progress has been most marked. Those social scientists that have sought to emulate the hypothetico-deductive methods of the natural sciences have generally done so without, perhaps, full recognition of the prerequisite requirement of well-founded kinds (as well as many other prerequisites of successful nomological research, such as the abandonment of a Humean account of causality and laws).

### 7.3 Instructions for use.

In using a motivated kind in the natural sciences one may draw the appropriate

inferences for the category more or less on faith (albeit noting any anomalies). Once soundly established, the associated laws and inferences are relatively stable over time and universal in their application under the existing normal research paradigm (until a new revolution therein). However, in the social realm the provenance and stability of any motivation underlying the classification scheme is of immediate pertinence in considering the reliability of any application to a new context. Yet the qualified contextuality of such classification schemes is seldom foregrounded by their promulgators and, as remarked above, there is a known propensity for third parties to assume motivation (whether claimed or not) and to reify received classification systems. A pragmatic view must acknowledge the ingenuity shown by strategists in adapting their tools to the case in hand. But far better if this was a conscious, deliberative act than an unreflective instinct. Assuming that some purported strategy classification scheme is to be promoted to the business community, it is important that some indication of the spatio-temporal domain in which it is claimed that it has some purchase is also provided. As with all tools there must be instructions for use (and, possibly, a 'use before' date).

#### 7.4 The lacuna in strategy classification research – look in the right direction.

Consequential upon the argument for recognition of the contribution of good classification to progress in our field, is the recognition of the absence of research designs predicated upon such belief. Instead we see what Medin and colleagues (Ahn et al, 2001; Coley et al, 1999; Medin & Ortony, 1989) remarked upon as 'psychological essentialism' as regards biological and artefactual kinds. The observation is that, no matter what its original status, people act as if a received class or concept has some essential properties that are both criterial for category membership and responsible for the observable characteristics of the class members. This is compounded by the natural tendency for reification of received taxa into unconsciously assumed 'real' phenomena. Research is then framed to ask the question how 'real' or 'essential' it truly is. There follows the construction of some research instrument to gather data on alleged properties that can then be challenged by empirical studies that quantify the assumed properties of the suggested categories and, deploying statistical techniques, find them warranted or not. Review of the treatment of strategy classifications in the research literature reveals this to be the predominant case in our field.

Given the simple fact that these are socially constructed categories of abstract institutional kinds and that the most common way of positing their existence is via ostention to existing organisations, it is impossible to prove their existence or non-existence since they stand as descriptions attached to abstractions. As long as some initial plausibility is achieved, validity, to some extent, stands in the eye of the beholder. No wonder then that the empirical results reek of ambiguity. Somewhat perversely, the upshot of much of this activity is the desuetude of the ambiguous categorisation scheme in question as 'invalid', when abandonment may well be justified, not by being not proven, but because it is not useful. No matter, the research is done, the results enter the copious and self-contradictory literature and the academy continues to worry about its 'relevance', but not its methodology. A methodology that has not attended to the crucial first task of finding and refining its motivated kinds.

## Chapter FOUR

### THE MILES AND SNOW TYPOLOGY.

*'I always thought that the adaptive cycle was underutilised – in fact, it was hardly used at all by subsequent researchers'. C. Snow, quoted in Ketchen, 2003, p99.*

#### 1 INTRODUCTION AND BACKGROUND.

The first case study is of a purported motivated kind. The 'Miles and Snow typology', first widely promulgated in the book *Organisational Strategy, Structure, and Process*, (Miles & Snow 1978, re-issued as a Stanford Classic, 2003) is an attempt to identify and characterise the ways in which a range of USA organisations adapted to the nature of, and changes in, their environment. The full work, including the performance and organisational implications, theoretical and other aspects of this major contribution to strategic thought (Hambrick, 2003) is not analysed in detail here. The focus in this research is upon only the context and content of their business strategy typology and its associated argument concerning the 'adaptive cycle' as a purported motivating mechanism. Since 1978 their Defender, Analyser, Prospector, Reactor typology has become one of the most familiar tools in the business strategists' vocabulary for providing, in the broadest terms possible, a descriptive label to a particular type of strategy choice. This, despite origins certainly remote from modern USA and British business and, perhaps, even further from the Korean or Finnish companies, or Israeli kibbutzim to which it has been applied (Kim & Lim, 1988; Segev, 1987; Woodside et al, 1999). From an original study of American college textbook publishers in the early 1970s, the typology has been applied to firms in Chapter 11 Bankruptcy or electronic commerce, to British electricity generators or to SMEs in Brazil, even to local authorities in Wales (Andrews et al, 2009; Evans & Green, 2000; Kearns, 2005; Ghobadian et al, 1998; Gimenez, 2000). It is the intention of this chapter to both outline the origins and nature of the Miles and Snow organisational typology – henceforward *the typology* – and to question and critique its application in our contemporary study of strategy.



This chapter divides into parts. The first, Sections 2-3 below, provides a detailed longitudinal view of the origins of the typology up to and including the definitive version of 1978. The following section examines the ontological plausibility of the typology as a classification scheme per se. The next two sections, 5 and 6, examine the ways in which the typology has been instrumented by the research community and the associated uses and abuses. It is argued that, in the main, the strategy research community has been asking the wrong questions and deploying the typology inappropriately in research. Finally, suggestions are made as to potentially more productive uses of Miles and Snow's work and further avenues of enquiry.

## 2 ORIGINS OF THE TYPOLOGY.

It should, first, be emphasised that the Miles and Snow typology was the most enduring and promulgated aspect of what was a much larger and, perhaps even more ambitious project – that of exploring and explaining the relationship between an organisation's priorities and internal resource configuration and its external environment. Albeit that other aspects of this work are discussed, in particular the 'adaptive cycle' held to underpin the types, it must be emphasised that this chapter is focussed upon the typology construct. It is not an attempt to critique the larger study in the round.

The typology, first outlined in a 1974 paper (Miles et al, 1974), was based upon Snow's study of the behaviour of some 16 US college textbook publishers in 1972. (Snow, 1976). It was the authors' way of distilling the essence of a highly elusive concept – that of business strategy. Strategy, to Miles, Snow and colleagues, was the way in which the resources and capabilities of the organisation were harnessed to achieving organisational goals. Witness the book's opening sentence '*An organisation is both an articulated purpose and an established mechanism for achieving it.*' (Miles & Snow 1978, p 3). It was recognised that organisations had a wide variety of purposes and many different means for their achievement. Yet, within this variety there must be some reoccurring patterns. The goal was to understand, and generalise from case studies, the similarities of how organisations set about the task of bringing strategy, structure and process together in such a way as to optimise success in the relevant environment.

This, they postulated, was the outcome of an ‘adaptive cycle’ (op cit p 21- 28) of managerial decision-making by the ‘dominant coalition’ in the light of their perception of the ‘enacted’ environment. (Child, 1972; Weick, 1979).

## 2.1 The 1974 Version

The conception of the typology is, like most conceptions should be, decently shrouded from view in an unpublished working paper. However, the theoretical underpinnings and much of the field work was carried in the early 1970s, and evidence that it was a few years in gestation comes particularly from two important published earlier papers. The first was co-authored by R.E. Miles and J. Pfeffer of Berkeley and C.C. Snow of Pennsylvania State University (Miles et al, 1974).

The title ‘*Organisation-Environment: Concepts and Issues*’, and the opening paragraph;

*‘To what extent are organisations shaped by their environments, that is, by the network of individuals, groups, agencies, and organisations with whom they interact ? Are there organisational characteristics – strategies, technologies, structures, processes – which are appropriate for one environment but which may lead to failure in another ? More pointedly, are there linkages across these characteristics which determine organisational success – are there, for example, particular structures and processes which fit certain technologies or strategies but not others ?’* (Miles et al 1974, p 244)

.....both give a very clear indication of the focus and basis of this work as being the accommodation between an organisation and its environment. The principal literature cited ~ Alchian, Burns & Stalker, Child, Emery & Trist, Gouldner, Starbuck and Weick ~ confirms this orientation to managerial choices of how to respond to their organisation’s environment. Miles et al discuss the issue in terms of top management ‘decision points’ regarding four elements they term ‘domain’, ‘technology’, ‘structure’ and ‘continuity’ and how a ‘feasible set’ of compatible choices in each leads to an ‘adjustment process’ of the organisation to its environment.

It was in this context, and that of the empirical studies of college textbook publishing firms, that a first version of the typology was presented as an attempt ‘*to categorise managerial perceptions of the environment and to describe how these perceptions are transformed into organisational responses*’; and four ‘*relatively distinct*

*types of environmental enactment*’ were proposed (op cit p 256). All four strategy types were given two word labels – they are ‘Domain Defenders’, ‘Reluctant Reactors’, ‘Anxious Analysers’ and ‘Enthusiastic Prospectors’. The full descriptions are given in Appendix 1.1. They were framed in relation to Karl Weick’s notion of the self-definition of the environment through management’s selective attention to aspects thereof – ‘enactment’ (Weick, 1969). The types were conceptually defined in relation to essentially just two dimensions:- The degree of environmental change and uncertainty perceived by the dominant coalition at the top of the organisation and their responsiveness or resistance to (changing) environmental conditions. Taking just one of the four types, it is possible to trace the development of the typology and reveal more of the conceptual basis of their work. Thus the Domain Defender is described:-

*‘Domain Defenders, organisations whose top managers perceive little or no change and uncertainty in the environment and who have little inclination to make anything other than minor adjustments in organisational structure and processes.’ ( p 256 ).*

Taking the key words from their descriptions (Appendix 1.1.A) it is possible to characterise the four types as given in Table 1, below;-

TABLE 4.1 THE TWO DIMENSIONAL TYPES

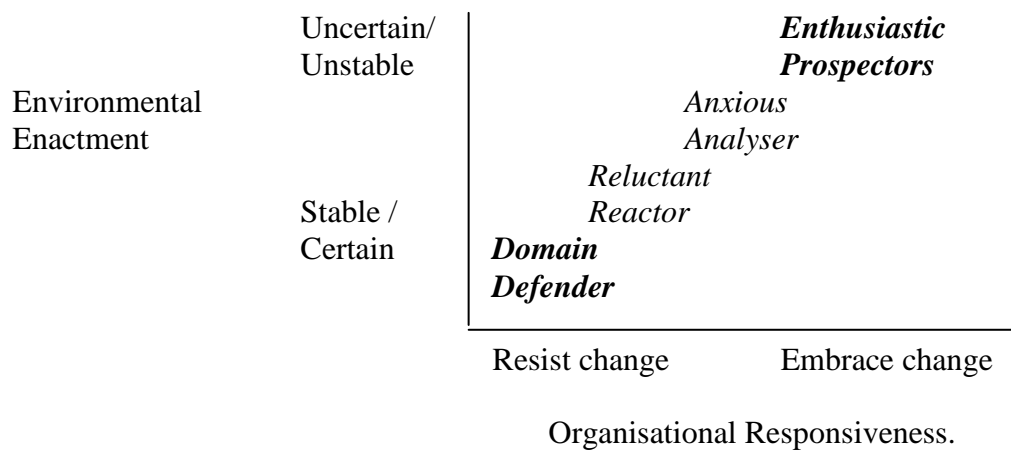
Type	Perception of Environment	Organisational Responsiveness
Domain Defender	No change or uncertainty	Minor adjustments only
Reluctant Reactor	Some change or uncertainty	Substantial change only when forced
Anxious Analyser	Much change and uncertainty	Wait and watch others. Rapidly adopt.
Enthusiastic Prospector	See (even foster ) much change	Trial proactive responses to anticipated change.

Source: Author, based upon Miles et al 1974.

These two dimensions and their accompanying definitions are such that this original description of the types is an implicit gradient-like construct in which top management’s perception of environmental change and characteristic organisational responsiveness increase in tandem – as has been represented in the bottom left to top right positioning of the four types in Figure 4.1, overleaf.

Thus, the 1974 four types are essentially defined by their positioning along a single continuum or vector as a diagonal in which there is an implicit causal or

FIGURE 4.1 THE 1974 TYPOLOGY AS A GRADIENT.



Source: Author, based upon Miles et al, 1974.

associative relationship between top management's perception of the environment and the willingness or ability of the organisation to respond to this perceived environmental instability or change. The four types are positioned from 'conservative' to 'radical' along this gradient. The gradient-like nature of this organisation-environment interaction is an interpretation and is not expressly given in the original paper (and the textual grounds of this interpretation was to disappear from later versions). It should be noted also that their construct description includes the caveat '*Although the typology is crude, subsuming a number of variables in addition to managerial perceptions....*' (op cit p 256-7). However, there is sufficient contextual content to support such a presentation, and this gradient-like construal of the typology appears in the writings of Miles and Snow and in subsequent academic writing about their work. It is, for example, used to justify the exclusion of the Analyser type as a mere intermediary in some treatments.

It is evident that the authors accepted, as established by others and their own observations, that the same 'objective' environmental context could elicit different, yet viable, organisational responses. For example, in relation to the suggestion that future research should look at the constraints upon managerial choice, they comment '*Such a focus would permit us to account for the frequent observation that organisations adopt a variety of forms in response to apparently similar environmental demands.*' (op cit p 256) and, in relation to adjustment costs and benefits; '*We have suggested, based on our*

*research, that within the same “objective” environment both Domain Defenders and Enthusiastic Prospectors can apparently survive and even flourish, at least in the short run.’* (op cit p 262). (See section 2.2. ‘Fit and Equifinality’).

In their conclusions Miles et al stress three points regarding the organisation-environment relationship:- (i) current theories are inadequate in explaining how environmental conditions place constraints on the adjustment alternatives; (ii) that managers have considerable decision-making discretion, meaning that managerial judgements and perceptions are important in determining choices and outcomes; and (iii) *‘To provide information on the total adjustment process, researchers will most likely be forced out of their current mode of cross-sectional survey studies and toward longitudinal analyses’*. (op cit p 264).

Thus, by as early as 1974, the basic framework and key concepts later to become known as ‘the Miles and Snow typology’ were established, and some of the issues of subsequent ambiguity and controversy were established.

## 2.2 The 1976 version.

This paper was sole authored by Charles Snow and published in the Academy of Management Proceedings. Again, the title:~ ‘The role of managerial perceptions in organisational adaptation: an exploratory study’ ~ clearly locates the typology within the context of adaptation and how attention focuses action. The typology itself shows just one modification to the wording of the descriptor for the Domain Defender, viz:-

*‘Domain Defenders, organisations whose top managers perceive little or no change and uncertainty in the organisation’s narrowly-defined domain and who have little inclination to make anything other than minor adjustments in organisational structure and processes.’* (op cit p 250 – emphasis added).

The descriptors for all the other three remain, mutatis mutandis, as before (See Appendix 1.1.B). There is also an indicative confirmation of an underlying ‘gradient-like’ conceptualisation given in the earlier presentation of the four 1974 types, as in Figure 4.1 above, in that Snow suggests positioning along a single gradient in the

phrasing ‘ *Using only the two extreme cases on the continuum of enactment*’ (op cit p 251 – emphasis added) and ‘*In order to highly [sic, presumably ‘highlight’] major similarities and differences, only the two polar types of organisations, *Domain Defenders and Enthusiastic Prospectors are shown.*’ (op cit p 253 – emphasis added). But note that the gradient conception used in Figure 4.1 here employs two dimensions (environmental change and organisational responsiveness), whilst Snow expresses it as a single attribute that calls to mind a straight line and opposite poles. This latter construct is Snow’s own descriptive representation of a single organisational attribute of ‘environmental enactment’, presumably measurable along some ill-defined continuum. Albeit that this is, probably, close to the gradient described above, the distinction is important and akin to that between a lay concept of ‘speed’ and a more scientific conceptualisation of ‘velocity’ ~ a gradient line showing distance travelled against time. As mentioned earlier, this ambiguity surfaces frequently when the typology is applied in research.*

Also of significance, is the additional wording in the definition of the Domain Defender, as underlined in the definition above. This has introduced a third dimension into the conceptual framework – that of domain scope. There is no doubt that this potential refinement was foreshadowed in the 1974 paper – viz ‘*Domain Defenders survive by working more intensively in a narrow segment of the environment, perhaps offsetting the loss of some potential gains in new areas by servicing their known area with increasing cost efficiency.*’ (1974 op cit p 262). The significance, however, is that the 1976 type specification is more complex and (at least potentially) versatile. No longer can organisations be positioned on just two dimensions, (or 4 cells maximum on binary positioning). There are now three dimensions which generates 8 possible cells, only four of which have been characterised. We have a Domain Defender with narrow scope, but none with broad scope, and, similarly, no narrow scope versions of the other three types. There is no explicit textual justification for these exclusions from the property zones defined by the three conceptual dimensions. It just appears that examples of such strategies are not..... Not what ? :- Encountered in the case studies to date ? Or to be found in the ‘real world’ of organisational strategies in general ? Or simply not viable configurations due to some powerful constraints or countervailing structures and mechanisms in the business environment ?

But, greater significance attaches to the characterisation that Snow provides for the types in the 1976 paper. This provides a far richer descriptive palette for characterising the types. For example in Figure 1 of that paper Snow gives ‘Some Key Aspects of the Adaptive Process’ for both Domain Defender and Enthusiastic Prospector – his ‘polar opposites’. He specified some 7 distinct behavioural or organisational attributes and the characteristics of each of the two types on these features. Thus, for two of the types, we have a multidimensional characterisation over 7 distinct aspects as represented in Table 4.2, below:-

TABLE 4.2 RICHER CHARACTERISATION OF TWO TYPES

Type of Environmental Enactment.	Domain Defender	Enthusiastic Prospector
Strategy	Narrow and relatively fixed product-market domain; primary focus on market penetration.	Changing product-market domain as opportunities appear; primary focus on product and market development.
Uncertainty about future.	Low perceived uncertainty	High perceived uncertainty
Organisational competence.	High perceived competence, mostly in the area of technological efficiency.	High perceived competence, mostly in the area of market identification and rapid product innovation.
Payoff from Experimentation.	Risk averter; must have solid evidence concerning shifts in the environment.	Risk taker; quick to develop initial capability on limited information about potential environmental trends
Subunit Power	Centralised; derived from efficiency oriented activities such as production and finance.	Decentralised; derived from effectiveness-oriented activities such as marketing and product development
Distinctive competence	Create and distribute a limited range of products cheaply and efficiently; respond rapidly to changes within but not outside domain	Rapid response to environmental trends; custom design products for specialised markets.
Performance	High	High.

Source: Author, based upon Snow 1976.

The significance of this development lies in the gradual transition from a theoretical and essentially simple construct to categorise managerial perceptions of the environment and organisational responses, with illustrative exemplars, which is a reasonable reading of the 1974 text, towards the much more rounded polythetic characterisations of the types in the 1976 version, leading eventually to the fully fledged typology based upon ‘idealisations from nature’ that the Miles and Snow typology was to become by 1978. Or, using Bailey’s 1994 distinction; a transition from a theoretical, deductive typology to a more ‘scientific’, case study observation-based, empirical, inductive taxonomy.

#### First assessment of the typology.

As the sub-title ‘an exploratory study’ intimates, the 1976 paper was a report of a test of the typology. To explore validity, Snow, in 1975, submitted the descriptions (developed jointly with Miles) of the four types to 13 top level executives in four of his original college textbook publishers. The four firms were selected as being representative of the four types, - ‘*one firm which he believed fit [sic] each of the four descriptions*’ (op cit p 250) - and many of the 13 respondents were still in post from his 1972 study. They were using the typology to classify their own organisation and those of three of their competitors. ‘*Agreement was almost unanimous regarding the placement of three of the firms into their respective categories; only with respect to the Enthusiastic Prospector was there any significant variety of opinion, with four of the thirteen respondents suggesting that the firm be labelled an Anxious Analyser.*’ (op cit p 250). Since Snow had selected the four most representative exemplars from his sample of 16, and that the respondents were merely asked to place four firms against four descriptions, this can only be judged as; i) a tentative confirmation of the viability of the single paragraph self-typing by senior executives approach that figures later in the development of the typology, (see below) and; ii) at best a partial confirmation that college textbook publishers could be found that conform to his typology. It was not a demonstration that all 16 of his USA college textbook publishers could be so classified, let alone any further extensions or generalisations from the typology to other contexts.

#### ‘Fit’ and ‘Equifinality’



The 1976 paper endorsed the 1974 view that no one type was superior in performance than another *‘provided that it is properly designed to pursue its chosen strategy.’* (op cit p 249). Indeed it went further; the contingency theorists had postulated that each industry environment called forth an optimum organisational ‘fit’, but Snow asserted that *‘several different “fits” were equally feasible....The recent heavy reliance on contingency models of organisation and environment, which suggest that organisations in similar environments are “forced” to employ similar structures and processes, seems to ignore the principle of equifinality – that managers may choose among several routes to effective performance.’* (op cit p 253). Their concept of ‘fit’ is reinterpreted here, and in later work, in terms of:- a) rejection of ‘environmental determinism’ (as associated particularly with Hannan & Freeman, 1977) in favour of a managerial choice perspective (Child, 1972); b) employment of the concept of managerial environmental enactment (Daft & Weick, 1984; Weick, 1969); and c) their own description of the coalignment process linking strategy to environment (Miles et al, 1974). The concept of ‘equifinality’ originates in the earlier work of von Bertalanffy and has been applied to other strategy classification schemes such as Porter’s generic strategies (Porter, 1980). This is generally seen as an alternative conception to the ecological determinists who argued that only one strategic posture will prove sustainable per industry or sector context. The term ‘equifinality’ is not expressly used in the later 1978 text. The principle is, however, clearly expressed in other terms therein, and the word has become a shorthand way of referring to the concept in subsequent discussion of the Miles and Snow model (e.g. Doty et al, 1993). There is no hint in the 1976 (or 1974) version of the typology regarding reservations as to the performance of one of the four that later emerges in respect of the Reactor type as given in 1978.

#### Adaptation and conclusions.

The ‘discussion’ section of Snow’s paper is primarily about the complexity of the relationship between perceived environment and organisational strategy and structure, listing a number of reasons why the adaptive process itself is resistant to simple enquiries. He also comments, regarding research that: *‘Most of the empirical research on organisations and environment has been cross-sectional. This research has identified numerous relationships between organisations and their environments, but, of course cross-sectional studies do not explore the dynamics of these relationships as*

*organisations evolve....Hopefully, this study has suggested some guidelines for a richer conceptualisation of managerial perceptions in future research.*’ (op cit p 254). In other words the typology was being presented as a means of investigation of perception / enactment and adaptation;~ as a conceptual heuristic.

### 3 1978 THE DEFINITIVE VERSION

The 1978 book arose from the collaboration of Raymond Miles and Charles Snow with two of their colleagues Alan Meyer and Henry J Coleman Jr, then doctoral students at Berkeley. It represented a coming together of three separate strands of empirical research – Snow on 16 firms in the college textbook publishing industry (as described in the 1976 paper); Meyer on 19 voluntary hospitals (as described in the book and his 1982 paper on how ideologies shape responses to environmental shocks) and Coleman on 27 food-processing and 22 electronics (mainly semiconductor) companies – and the conceptual framework of the firm / environment relationship provided, in the main, by Miles and Snow.

#### The Adaptive Cycle.

The principal question that this work addressed was that of the co-ordination of strategy, structure and process within a business unit as a response and fit to the (changing) business environment and how the adjustment is achieved or enacted. This required top managers to make decisions concerning their organisation that addressed what was characterised in the book as three generic top level problems facing all management:- the Entrepreneurial problem (or the choice of what product-market domain to operate within); the Engineering problem (or what technologies or means to employ to deliver the solution); and the Administrative problem (the process that both defined the organisation’s structures and processes and directed the search for innovation). This, in a chapter titled ‘The Process of Organisational Adaptation’, they described and labelled, in their Figure 2.1, as the ‘adaptive cycle’ which *‘helped to explain the emergence and stability of our strategic types’* (Miles & Snow, 1978 p xv). The adaptive cycle is, thus, held to be the underlying mechanism, or causal process, that brings the internal strategy, structure and processes of the organisation into concert with its environment. This they termed ‘fit’. This was the first time the term adaptive cycle

was formalised and illustrated as a model. Given its significance as the proximate causal mechanism (albeit presumably consequential to deeper lying structures and mechanisms) of the organisational strategy, structure and process that is the focus of their work, Miles and Snow provided relatively little characterisation of the available solutions to the three generic problems or of the typical operation(s) of the cycle.

Yet the adaptive cycle defines the task and process of strategic management and goes to the heart of business strategy. Through management's articulation of purpose and incremental or decisive actions, the adaptive cycle is held to work, like an invisible hand in an internal market, to bring the three domains – the entrepreneurial, the technical and the administrative – into harmony with one another in certain configurations that are consistent with success in meeting the requirements of the environment i.e. 'fit' arises from the implementation of management decisions based upon their perception of the organisation's environment and their room for action. The adaptive cycle is a postulated internal mechanism that, if functioning correctly, brings about the alignment of structure, strategy and process with the requirements of the organisation's environment as 'enacted' by top management. Since the detail of how it brought about these effects was not explicated, one has to regard this as a 'placeholder notion' that supported a set of motivated kinds. The types, therefore, emerge from these adjustments:~ *'In the organisations we have observed, patterns of adjustment emerge which tend to constrain management's choices during the next cycle of adaptation. Four of these adjustment patterns are briefly described in the next section'* (op cit p 28 ~ The 'next section' being where the four types are first introduced. See below.).

### The typology.

The typology is first described towards the end of Chapter 2 under the sub-heading 'Types of Organisational Adaptation'. It answered their second objective:- *'to provide an explanation of the alternative forms of adaptive behaviour which exist in the industries we have studied and which are **probably** present in **most** other industries.'* (op cit p 11-12, emphasis added). The resultant typology was recognisably that put forward in their earlier works and consisted of three effective types of organisational configuration, now with single word labels: the Defender, the Prospector and the Analyser. However, the fourth type, the Reactor, was held to be unable to respond

effectively to a changing environment. This is a clear departure from the ‘vectoral conceptualisation’ of the Reluctant Reactor as given in the 1974 and 1976 versions and is a significant disjunction, the causes of which are not revealed from this textual analysis. It was these four archetypes that seem to have caught on and they had a far more enduring influence than the accompanying adaptive cycle. Indeed, as Hambrick (2003) observed, they have become part of the canon of strategic analysis. As outlined earlier, associated with the typology was a notion of ‘equifinality’ – the view that there is more than one way to succeed in an industry and that, the Reactor category aside, no one configuration is superior to any other.

The method of presentation is one of illustration of types in relation to vignettes of a few of the organisations encountered in their field work. The generalised salient characteristics are described at some length and, all but the Reactor, have a table setting these out as the distinctive approaches of each type to the three ‘problems’ that organisational design, structure and strategy must address. In subsequent work, (Snow & Hrebiniak 1980), the prototypical, generic characteristics are set out in one paragraph rich descriptions for self-classification by top managements of organisations co-operating in their research. The authors’ Introduction to the 2003 re-issue of their book comments, in relation to the second of their 1978 objectives *‘Although this claim was probably presumptuous given our limited samples of industries, the **strategy proposition** nevertheless provided us with a parsimonious means of describing alternative, complex and successful adaptation behaviours within widely different industry environments. We continue to find the concept of firms trying to follow a consistent pattern of decision-making and behaviour to be valuable...*’ (op cit p xvi - emphasis in original). The claim is, thus, that these prototypical specimens provide a classification template of possible configurations and strategic stances taken by the sample firms in the range of industries investigated and that they, probably, encompass the possible types found in most industries.

By the 1978 book the typologies had been extensively described in a richer, multidimensional manner – more as gestalts than simple labelled dimensions. The single sentence type descriptors have become paragraphs. All four descriptions are given in Appendix 1.1.C, but the general characteristics for the ‘Defender’ are as given below, with comments;

*‘Defenders are organisations which have narrow product-market domains. Top managers in this type of organisation are highly expert in their organisation’s limited area of operation but do not tend to search outside of their domains for new opportunities. As a result of this narrow focus, these organisations seldom need to make major adjustments in their technology, structure or methods of operation. Instead, they devote primary attention to improving the efficiency of their existing operations.’ (op cit p 29 ).*

The main change to note is that whilst we have richer descriptions of the archetypes (for example, 74 words for the 1978 descriptive paragraph compared with the 34 word 1976 equivalent) the relative position of the Defender on the environmental enactment axis of the typology (as given in Figure 1, above) is not specified in the 1978 version. The same is true for the Prospector type. The Analyser could be construed as containing an implied dual focus environmental enactment, whereas the Reactor’s environmental enactment as frequently changeable and uncertain is explicit.

#### Polymorphic categories.

Using these paragraph descriptors, we now have a multidimensional construct, that has not only developed, but changed, from that postulated in 1974 / 6 to a far more characterised scheme of many projectable properties appropriate to each type: polymorphic categories. Appendix 2 sets out the dimensions and characteristics of all four types. That for the Defender is reproduced below:-

TABLE 4.3 THE TYPOLOGY AS A MULTIDIMENSIONAL CONSTUCT

Dimension	Defender’s characteristics as at 1978	Same/similar in... 1974 ? 1976 ?	
Environmental perception	Enactment not specified ( as an attribute of the type. )	No	No
Environmental Scrutiny	Limited search by top management.	No	Yes
Organisational responsiveness	Minor only. Major adjustments are relatively infrequent.	Yes	Yes
Product-Market Domain	Narrow.	No	Yes
Management focus	Operational efficiency.	No	No.
Operational effectiveness.	( High -implied )	( No )	( No )

Source: Author, based upon Miles & Snow 1978 (p29) and Miles et al, 1974, & Snow, 1976.

These single paragraph descriptions provide a characterisation of each type on up to six dimensions or properties, but afford only some tenuous similarities with the earlier characterisation of the Domain Defender and Enthusiastic Prospector given in Table 4.2 above. In theory, and assuming a simple binary specification on each property ( high/low, broad/narrow, stable/unstable, etc) some 64 potential property spaces have been created, of which just three are occupied with specified archetypes. Furthermore, the 1978 typology was further described, as regards the three successful types, by means of detailed tables which set out the characteristic ways in which each conceptualised and solved the three elements of the adaptive cycle and the associated costs and benefits. These are summarised in Appendix 1.3.A-C. The fourth type, the Reactor, was not set out in such a manner, being now expressly regarded as a failure to coordinate the various components of the adaptive cycle and, thus, resembling a mix or hybrid of the three successful types. Space forbids more extensive exegesis of the 1978 text – there is a chapter devoted to each of the four types, complete with selected case examples. However, the types have now been delineated over at least 16 different property ‘dimensions’:- see Appendix 1.2 and 1.3A-C. Such a characterisation, were it to be applied simply in the binary form to all possible permutations would result in a potential of over 65,000 other archetypes:- Is it around 65,000 short of descriptions ? or are there a host of substructured (i.e. unoccupied) categories that in practice have no exemplars ?

Thus, by 1978 the outline and detail of the Miles and Snow typology were definitively expressed and available as an idealised typification via richly characterised archetypes for third parties to employ when examining business strategies. As a proposed practical classification system, however, the 1978 typology faces three fundamental problems compared to the 1974 / 1976 precursors. First, to become sufficiently parsimonious it must rely upon either some simplifying assumptions as to the principal dimensions for categorisation of an organisation and / or employ a majority rule or similar heuristic to reduce the number of archetypes. Secondly, far from being the simple binary positions (present/absent) on the property dimensions referred to above, actual observations will relate to nominal, ordinal and interval measures of organisational features that are seldom straightforward to ascertain (even with a willing and well-informed respondent) and frequently involve a subjective assessment (whether by an internal informant, or external expert or researcher) if used as a measure for categorisation of strategy. Finally, it should be noted that not all of the dimensions are

specified within the 1978 text for all three well-characterised types, such that even where it is possible to make an observation consistent with the dimensional construct, the position of the archetype on that construct may itself be unknown.

The 1978 version of the typology has a richer depth of characterisation of the types, but at some cost of greater ambiguity about categorisation. It added to the verisimilitude of the typology as rooted in field studies, but at a cost of its projectability to other sets of organisations, and unpredictability in inter-rater classification. A tension that resurfaces in later discussion; not least the next three sections.

#### 4 THE PROJECTABLE CLASSIFICATORY SYSTEM - TYPOLOGY OR TAXONOMY ?

The 1974 or 1976 version of the typology, as simple conceptualisations, were potentially projectable in Nelson Goodman's (1983) terms, in that the types could be predicated as dispositional properties of business strategies. However, as Goodman also describes, more is required for projectability to be achieved, and that is that the terms concerned are, in his word, 'entrenched' in language. For the terms analyser, defender, prospector and reactor to be actually projectable they must acquire a certain familiarity and credence within the language community concerned i.e. strategists of all types. Only then can the terms be used meaningfully and intersubjectively to impute properties and characteristics of their designations such that they convey inferential utility. The typology appealed to a need for simple, generalisable and catchy terminology to describe business strategies, plausibly based on real business behaviour and that could replace vague analogies to other domains such as military strategy. It was the 1978 book's publication from well-regarded researchers from prestigious universities and drawing upon years of research across a number of different fields, that propelled the typology into the consciousness of the language community and achieved this authentication:- the Miles and Snow typology had entered the strategists' lexicon and a business strategy classification scheme was born.

Considering the original classification system as proposed, (Miles et al 1974, Snow 1976) its description as a 'typology' (using Bailey's 1994 nomenclature) is correct. Albeit the presentation in Miles and Snow (1978) is such that the empirical base

for the proposed categories was emphasised, the original derivation was essentially conceptual and the typology has, to a considerable extent been synthesised with empirical observations to become an operational classification system. The conceptual framework was under construction as the empirical investigations were underway and it is entirely conventional for a typology to be constructed in this manner. Furthermore, whilst a taxonomy would require decision rules for categorisation, a typology can accept recognition against archetype or discernment against rich paragraph descriptions as offered here. The typology as promulgated in the 1978 book is a step beyond a straightforward typology towards a synthetic classification in that multiple dimensions are specified to assist the operationalisation of the scheme. Although an ideal descriptive pro forma would employ a restricted number of identical scale dimensions, there are, at least, no major inconsistencies or incommensurables in the descriptors they set out in their Tables 3.1, 4.1 and 5.1 and the general description offered for the 'reactor' type.

The key question as regards projectability is the degree to which, in further characterising the attributes of their types, Miles and Snow's 1978 version was less projectable than the earlier, purer, typology. Had the richer descriptions of the types become overdetermined? That they had managed to achieve entrenchment is not questioned, but whether the result was to strengthen or somehow weaken the underlying product is debateable. The parsimonious four types are at a high level of generality (more like cross-cutting kinds than species), and the danger lies in the over-specification of second-order attributes by examining functional and structural aspects that may not conform to their generalisations in each exemplification of actual strategies. In other words, the simple single paragraph descriptors offered in the 1978 book were probably more potent than the further characterisation offered in the detailed chapters dealing with each type where specific attributes are extracted and illustrated via their field work exemplars. In a similar manner it may be more effective to describe another abstract kind ~ art genres ~ by means of short descriptions and reference to particular artists, than by detailed prescription of periods, subject matter, media, colouration, etc.



## 5 INTENSION AND DENOTATION.

The intension of the types is easily grasped by reference to their labels. Miles and Snow have succeeded in attaching labels to their types that capture in a single word the essence of the organisational strategy concerned. Strategic intention and conceptual intension are happily coincident. Defenders defend; prospectors prospect; analysers analyse; and reactors react. This linguistic felicity in labelling strikes one as a significant contribution to the enduring success of the typology. Whether the subsequent further characterisation of the types in the full detail set out in the 1978 book has clarified and disambiguated their types, or not, is a moot point. Arguably, the main contribution of the detailed descriptions has been to authenticate the typology's credentials in terms of research in real organisational settings.

## 6 EXTENSION - WARRANTS AND QUALIFIERS.

It is recommended (Doty et al, 1993) that theories are identified with their boundary conditions. There are no terms that explicitly warrant that the Miles and Snow (1978) typology extends to the categorisation of all possible organisations in the world at any time. In fact we find, (op cit, p 30), the observation *'Any typology, of course, is unlikely to encompass every form of organisational behaviour – the world of organisations is much too changeable and complex to permit such a claim'*. However, 'not everything' is an inadequate definition of the population of organisations to which the typology does relate. There are no qualifiers that limit the boundary conditions to USA, (the source of their empirical investigations) or any part of the world, nor as to time. Since the text to the 2003 Introduction lacks qualification as to the effects of time, economic systems and structures, cultures and the like, the default assumption is that the authors are at least making no retrodictive qualifiers. Given that, (Snow & Hrebiniak, 1980), the original typology was conceived principally by Snow in relation to his emerging theoretical framework and his 1972 studies with just 16 college textbook publishers, (Snow, 1976) this may be viewed as justifiably termed 'presumptuous' above. Although, there is nothing unusual in practice in this lack of warrant and qualification, the lacunae in floating a very highly specified set of 'types' without specifying also the population of 'organisations' to which it applies, is regrettable. Instructions for intended use are appropriate with a new analytical proposition.

Seeking the implicit warrant as to application, we can examine the text and its research base. Before publication the typology was 'road tested' against a number of organisations - both profit and non-profit; high technology and low; manufacturing and service; and geographically dispersed within USA. The major omissions are, therefore, Governmental and non-USA organisations. This would point to a reasonable claim that, at least as regards that economy, at that time, the classification system should prove reasonably exhaustive. However, four considerations should have weighed in the promulgation of the typology as regards extension:-

First, it is evident that the within study test of the typology proved satisfactory for Snow's reasonably homogeneous group of textbook publishers (Levitt & Ness, 1989) and Meyer's '*small tightly knit*' (Miles & Snow 1978, p 11) sample of 19 voluntary general hospitals in a single region of California. But it was less satisfactory for Coleman's more geographically dispersed and variegated sample of 49 food processing or electronics companies, where '*executives were not always able to describe or evaluate other companies in their respective industries, and while the typology was generally supported, it could not be definitively concluded that it was a valid means of classifying organisations*' (op cit p 10). Here is a sensible, very early, caution as to the generalisability of their typology that received little focus in their presentation thereof. There is in both the college textbook publishing industry and the hospital sector a strong coercive isomorphism (DiMaggio & Powell, 1983) created by the higher education institutional or health funding and regulation context within which they operate. It is possible to construe the differing environmental perceptions and responsiveness for such firms as being a necessary and deliberate (or emergent) enactment of strategic distinctiveness in the face of a uniform common environment. A fine grain supply heterogeneity in response to a coarse grain demand homogeneity. This suggests that the Miles and Snow typology would be a useful tool for the exploration of within-group differences in strategy amongst firms in the same industry group.

Whereas Coleman's inconclusive study of 22 electronics firms and 27 food-processing companies was, in part, an attempt to explore the generalisability of the theoretical framework with a more diverse set of environments and organisations. As regards the typing of these organisations he reported (op cit Chapter 12) difficulties in

using researcher-designated or CEO-designated typing. For example, of the 27 (from 49) organisations for which at least two CEOs provided third party typing, he reported; *'The ratings reflected a modest level of agreement concerning the strategic type of these firms; overall, 39 percent of the ratings for the 27 organisations fell in the modal type of each firm.'* (Miles & Snow, 1978, p 211). Thus the expectation that the typology will provide internal homogeneity and external heterogeneity across a wide spectrum of organisations is not robustly supported in the original case studies of classification according to evidence from the scheme's proponents. A qualification as to application in diverse industries and across industries was amply justified, but not provided.

Second, the authors were well aware that in the late 1970s, in response to the growth and internationalisation of many American firms, a new 'matrix' form of organisation was rapidly emerging and that, alongside the rapid changes in industrial structure on the wave of the 'information technology' revolution, would imply a need to qualify the application to contemporary conditions. This, appropriate qualification is explicitly acknowledged in the text (Chapter 9, *'Mixed strategies and structures.'*). There is also a more general theme that emerges in the book, that of unfinished business ~ that this was an early exposition of interim findings that would be amplified and modified in the light of further research. For example the concluding sentences of Chapter 13 'Management and strategy' read as follows:-

*'In no sense do we consider or offer these studies as "proof" of the validity of our conceptual framework. It is our hope that the utility of this approach for understanding intra-industry variations in environmental enactment and internal organisational characteristics will be examined in a variety of other settings. We believe this approach will prove useful and that it should, at least, provide the raw material for more advanced conceptualisations.'* (Miles & Snow, 1978, p 245.)

Thirdly, of course, the intimate links between their whole conception of corporate and business strategy and a capitalist market economy should have caused some qualification as to application outside of such context. None is provided. All research was carried out in USA in the first half of the 1970s and is intimately bound into the socio-politico-economic society of that time and place. Whether the resultant categories would apply outside this temporal, spatial or societal context is a matter for serious deliberation, particularly from the vantage point of an early 21<sup>st</sup> century

globalised economy when the Foreword and Introduction to the 2003 classic edition were written.

Fourthly, and finally, where a typology departs from the desirable classification criterion of being exhaustive of the population in that it fails to provide an archetype for property space(s) created by its own conceptualisation, then a final category of ‘Other’ or ‘Not elsewhere specified’ should be supplied. The ‘broad scope defender’ is an example of a discounted property space under the Miles and Snow typology, in that there is no description of the fifth archetype for such an organisation, nor some catch all category to cover all such discounted property spaces. There are two possible constructions of this fact. Either the somewhat ill-specified or hybrid type, the Reactor, could have been intended as a catch all for those organisations failing to conform to the more clearly specified types. (At times the text allows for such an interpretation and some later commentators / researchers have taken this line.). Or, alternatively, the authors did envisage that the typology would encompass the entire population. Although to impute this latter alternative might appear somewhat far fetched, it must be recognised that the typology as originally set out in 1974 could sensibly be applied to all organisations. All organisations must sense their environment in terms of stability and certainty and all organisations must determine in what manner they will respond to that environment. The simple two dimensional classification typology of 1974 could plausibly make a claim to universality. The more complex and highly specified 1978 version could not. There is no explicit acknowledgement of this limitation.

## 7 ONTOLOGICAL PLAUSIBILITY

The previous section has reviewed the typology as a question of practical adequacy. In functional terms, Miles and Snow had succeeded in proffering an intersubjective strategy classification scheme to practitioners, researchers and teachers alike. That review examined the (implicit) warrants as to generalisability and, in so doing, has critiqued the presentation as inadequately qualified in respect of i) the limited success in original application to diverse industries; ii) possibly, being particular to USA, or North American or Anglo Saxon capitalist economies of the 1970s and 1980s; iii) creating property spaces that are conceptually available but are not characterised with archetypes in the reduced typology put forward, and (iv) lack of an ‘other’ type.

The next section, 8 below, will examine the plausibility of the claim to a grounding of the typology in the outcome of the adaptive cycle's operations in achieving 'fit'. In this section the question of whether (as a simple nomenclature or heuristic classification scheme) the typology 'rings true' of its domain's contents. That is to say that it is critiqued as a classification system from the points of view of its ontological plausibility, irrespective of any claims to some known motivation.

It is not easy to tease apart 'practical adequacy' as evaluated above, from the question of 'ontological plausibility' addressed here. First, it is assumed that it is possible to predicate a property, or set of properties, of an organisation that purports to capture its strategy. Second, if it is possible to point to a fair example of same, it is incontrovertible that such an individual instance of the strategy "exists". The issue, therefore, is not an existential one, but about the projectability from one case to others. Thus, we can describe a strategy of opening a hardware store in Nuneaton, or of launching a new soft drink range, or defending market share at all costs, or any number of other potential strategies, and we can hold that such a strategy is an archetype projectable to other instances. Ontological plausibility is about the credibility of that projection. Nelson Goodman (1978,1983), in examining how we make social worlds that constitute the viewpoints from which our projections are made, explored in some depth the problems of induction and prediction. In his terms, we are here postulating a 'presumptive kind'~ a disposition to execute some strategy. The evaluation of same requires that, as a first step, it is compared with the whole panoply of competing, complementary, and overriding kinds and entrenched hypotheses about the relevant field and its kinds. The presumptive kind is evaluated against the framework that constitutes the worldview of the strategist. Hence, it is not some extra-linguistic "reality" that is being examined when dealing with abstract social kinds; 'In a sense, not the word itself but the class it selects is what becomes entrenched, and to speak of the entrenchment of a predicate is to speak elliptically of the entrenchment of the extension of that predicate. On the other hand, the class becomes entrenched only through the projection of the predicates selecting it: entrenchment derives from the use of language.' (Goodman, 1983, p 95). Indeed, the whole arena of social kinds depends upon the constitutive uses of language (Searle 1995, 1999).

To critique the Miles and Snow typology from an ontological standpoint is to raise the issue of whether, in the light of the wider body of projectable properties entrenched in the strategists' world, it is plausible that;- i) a significant number of organisations that conform to the proffered descriptions or archetypes can be identified in a variety of contexts such that they are generalisable under that denotation; and ii) whether there exist a significant number of organisations in the same population that cannot sensibly and reliably be so categorised, such that either the typology should be abandoned, or a superior classification can be devised by extending the categories, or revising the descriptions. Further, it also asks whether;- iii) the detailed characterisation of the archetypes provides a consistent set of properties for the envisaged contexts; and iv) whether the types of organisations so delineated would plausibly thrive across a range of industries and contexts. For example, one may raise five such issues in relation to the ontological plausibility of the Defender type:-

1 Implicit in the typology as set out is the notion that the narrow product-market domain provides a more stable niche. Our contemporary interpretation would be that a segment of a market may or may not be more stable than the whole; in grocery retailing, staples such as milk and bread are less volatile than luxuries such as shakes and cakes. Stability is a property of segment content, not segment size. However, the whole is always more stable than the parts that aggregate to it and a greater number of segments will be less, rather than more, stable than the whole. The Defender is described as both a stability-seeker and a niche-seeker. There is no necessary connection between the two and some potential conflict - i.e. there are logical inconsistencies in the argument.

2 If the authors had intended the characteristics of the Defender to be so designated, it must have been sensible and logical for them to have ruled out the existence (or at least in the format specified in their characterisation) of Defenders in certain volatile industries, such as high fashion or technology, or in highly differentiated product markets, etc. That is to say, the features of the Defender are inconsistent with profitable performance in certain industries, but complementary to other (stable or basic commodity) types of industry. The authors have, however, embraced the equifinality principle at the expense of denying the contingent nature of some aspects of their typology - i.e. there are logical consequences which have not been acknowledged.

3 In a similar vein, the characteristics of the Defender as set out by them, such as focus upon a core technology, vertical integration, continuous improvement and cautious and incremental growth primarily through market penetration might be descriptive of a differentiator in a mature industry characterised by a stable technology (Porter, 1980). Yet other features of the Defender's characteristics, such as emphasis upon production efficiency, price competitiveness, functional structures and centralised control, are all typical of a cost leadership posture and appear to disqualify a Defender from adopting a differentiation strategy - i.e. potential internal inconsistencies or contradictions might be detected in their detailed characterisation.

4 Consigning the Defender type to narrow product-market domains effectively rules out the possibility of dominant firms within an industry conforming to a Defender role. Yet many such firms protecting their dominance, particularly in commodity-like industries, appear to adopt Defender-like characteristics - i.e. there are incompatibilities between observed organisational behaviour and the permitted typing.

5 There are path dependent firm-specific features such as size and age that, whilst compatible with the industry as a whole, would be incompatible with successful performance in certain type roles. For example a start up company can hardly be a 'Defender' - i.e. the typology is silent regarding certain organisational properties that lead to consequential exclusions from generalisable types.

In summary, there appear to be some inconsistencies between the specification of the Defender archetype and the range of Defender-like organisations depicted in practice. A set of substantive problematic issues could similarly be raised in relation to the three other types. Whilst substantive problems concerning the establishment of boundaries as regards application across diverse industries, socio-politico-economic systems and geographies have already been discussed. To summarise, one may conclude that:-

- i) There are organisations (as cited in the 1978 work) that conform to all four types.

ii) There are clearly organisations that fall outside the types. The partitioning of the population upon the specified characteristics (and the non-provision of alternative appropriate categories) creates additional unclassified types. The typology is not exhaustive of the population.

iii) Inconsistencies can be detected in the detailed characterisation of the types, particularly when a range of environmental contexts are considered.

iv) There are reasonable grounds for doubt as to whether certain types are likely to be compatible with success in particular organisational histories and settings.

## 8 A MOTIVATED KIND ? – THE ADAPTIVE CYCLE.

The above discussion considers the ontological plausibility of the Miles and Snow classification scheme as originally proposed. It does not, however, encompass a key question being raised in this thesis as to the central role of ‘motivation’ to any promulgated classification scheme. To what extent is the typology the product of an accommodation between epistemic practices and real causal structures and mechanisms ? That question arises especially with regard to the adaptive cycle as a placeholder for just such a mechanism. As argued in this thesis, the possible motivation of kinds is an important consideration in evaluating their scientific utility. It is the inferential qualities of a category that contribute most to its value in cognition, and motivated kinds are more potent in that respect. Those considerations were encouraged by examination of the philosophical and cognitive basis of classification schemes applied to abstract institutional social kinds in general, and which do not, in the main, figure significantly in the management and organisational science literature concerning classification. For example, apart from a reference to Tiryakian (1968), on social science classification, the 1978 book’s impressive bibliography contains no indication of considerations beyond a general field firmly centred around management and organisational science, with minor excursions into social psychology, decision sciences and industrial economics. There is little evidence of any engagement with the issues discussed in Chapters 1-3 above that underpin this critique. In other words, the question now being addressed did not occupy Miles, Snow or their collaborators. These issues will be touched upon below in this chapter, but will be considered further later under the ‘Conclusions’ chapter of the thesis.



Miles and Snow's work suggested to the research community of the 1980s and 1990s, particularly in the USA, two distinct areas for empirical research; - the validity of their parsimonious classification system of four types and the equifinality of three of these; and the workings of their postulated mechanism of causality – the adaptive cycle. On the latter there is little evidence of substantive development, albeit that work with the typology often drew upon the notion of the cycle as described in 1978. Miles and Snow returned (1984) to the associated concept of 'fit' without further development of the adaptive cycle, which seems, therein, to have been subsumed without mention. The general concept of 'fit' between an organisation and its environment is longstanding and ubiquitous within the strategy literature, but Miles and Snow had a more contextually specific meaning in 1978 since they referred to the adaptive cycle as a set of internal mechanisms that brought about the alignment. (A principal exception is Chakravarthy (1982), who proposed his own and somewhat independent development of the adaptive cycle. That conceptualisation has not commanded the attention of the mainstream research community.)

We are, thus, largely left with the mechanism of the adaptive cycle only in so far as it was articulated in the 1978 book, with its three interacting elements: the entrepreneurial, the administrative and the engineering. It is clear that, in the terms of this thesis, the homogeneity of strategic behaviour recognised in the Miles and Snow typology was postulated as a consequence of some underlying causal forces; it is a purported motivated kind. However, whilst the three elements and the adaptive cycle itself are described, the manner in which it gives rise to the types is not. A mechanism is intimated, but how the mechanism works is not. The book explicates the relationship as follows:-

*'Because management is relatively free to choose among [many] alternative forms of each of these major organisational features [the three elements of the adaptive cycle], the range of strategy-structure relationships is potentially vast. When competing organisations within a single industry are observed, however, patterns of behaviour begin to emerge which suggest that these various organisational forms can be reduced to several archetypes. So far from our research and our interpretation of the literature, we have identified four such organisation types. Each of these types has its own strategy for responding to*

*the environment, and each has a particular configuration of technology, structure and process that is consistent with its strategy. These organisation types, which we have named the Defender,.....' (Miles & Snow 1978, p 29, [with additions]).*

However, it should be noted that their conception of the three components does not overlay comfortably with the conventional functional divisions or departments of a commercial organisation (finance, production, marketing and sales, etc). Exactly how this trio of problems that management must continually solve relate, not to their perceptions of the external environment and the problems that it may set, but to the levers of action within the organisation itself that must be brought into play in order to answer those questions is just not explicated. Furthermore, the actual operation of the adaptive cycle is not described in any coherent way in the text, despite numerous references thereto. Indeed it is not clear how one would recognise the cycle in motion. It is an intriguing overarching notion, since there must be ways in which an organisation changes in the light of changing circumstances, but it is one that is difficult to pin down. Note that the adaptive cycle has not provided a framework for subsequent research of any note. It does not figure strongly in the voluminous 'change management' literature.

From a contemporary perspective, and adopting a broadly weak social constructivist or a critical realist stance, one might view purported social institutional abstract kinds as potentially the product of causal mechanisms within both the organisation and its environment and, accordingly, expect some explication of same. (Danermark et al, 2002; Elder-Vass, 2010; Sayer, 2000; Searle, 1995, 1999). In 1978 the expectations of readers would, in all likelihood, be entirely different, allowing for the functioning of the cycle and the mechanism(s) by which the types result to be intimated and labelled, but left unexplored. That, it could be reasonably anticipated, would be the task of further research. Miles and Snow suggested as much in their concluding chapter. Yet the literature that followed the 1978 publication did not adopt Miles and Snow's adaptive cycle (contra their typology) as a central component.

That the internal mechanisms of adaptive change pointed to by Miles and Snow was not explored by others raises the possibility of two explanations beyond the simple attribution to the fact that it was too sketchy and inconvenient in its outline. The first is that the Miles and Snow claim was not taken too seriously at the time. Miles and Snow

had produced a plausible *deus ex machina* to account for the emergence of their types, but this was a somewhat inchoate metaphorical device rather than a concrete observation of causality at work. Indeed all would understand that any such mechanisms, or causal structures in the social realm, could only be detected from salient cues in their observations, rather than be directly observable. (The predisposition termed ‘psychological essentialism’ allowed for a placeholder notion of mechanism to provide a satisfactory account, despite its flimsy outline). Thus, the first explanation can be reduced to polite disbelief or lack of interest. The second, is simply pragmatic. Messrs Miles, Snow, Meyer and Coleman had assembled and reported upon the generalised findings of a large number of case studies conducted over many years. Replication would be impossible and even an imitation fraught with cost and risk. Far easier and safer to investigate the reported typology and, perhaps, thereby throw greater light upon the causal forces at work thereon. As explicitly recognised in both the 1974 and 1976 papers, research had tended (and still does today) to focus upon cross-sectional quantitative studies, rather than longitudinal qualitative studies which would be required in any work that sought to investigate and expand upon the adaptive cycle. Whatever the reasons, the fact remains that the strategy community was not too interested in following up what, from a scientific viewpoint, was the most intriguing aspect of the 1978 book.

So, although presented as a motivated kind classification scheme, the Miles and Snow typology was treated, in general, as if it were a nomenclative scheme. That is, it was seen as a structured, agreed sorting and ordinary language naming scheme for the strategy community ~ a nominal system that recognises how things are in the world of organisational structure and strategy. Yet to become a set of reasonably well-understood and reasonably determinable archetypes, adopted as a familiar component of strategy discourse and a means of exploring performance implications, it requires something more accessible than a 274 page book. It called for some simpler instrumentation of the complex descriptions that had been provided by Miles and Snow in 1978.

## 9 SUBSEQUENT SYNTHESIS – THE OPERATIONAL CLASSIFICATION

There is no desire here to attempt to summarise and synthesise all the research material content of papers citing the Miles and Snow typology. This is not a meta study

of the Miles and Snow typology, but a case study in categorisations of organisational strategy. Thus, another way of examining the promulgation and application of the typology is to examine, not the results of these studies, but the basis upon which the results were sought. The job being to reveal the implicit understanding of the typology as a phenomena being investigated. It is the latter which reveals the way in which the Miles and Snow typology was construed by strategists and academics interested in strategy research.

#### The instrumented kinds – recognition heuristics.

In contrast to the lack of interest in investigating the adaptive cycle, there has been very substantial development of research on the typology in two directions. First, the design and implementation of operational classification constructs to enable empirical investigation of the typology; either by rich one paragraph descriptions of the conceptual types (Conant et al 1990; James & Hatten, 1995; McDaniel & Kolari, 1987; Snow & Hrebiniak, 1980); or by devising a research instrument to measure the variables considered characteristic of the archetypes under investigation, using the attributes contained in Miles and Snow's work. (Segev, 1987; Shortell & Zajac, 1990). In other words, very shortly after its first promulgation in 1978, the typology had been developed into a synthetic (operational) classification scheme for use as a research instrument. In so doing the Defender, Analyser, Prospector and Reactor constructs had become reified - they had been endowed with substance and reality by virtue of being authoritatively deployed in this manner. The research question was increasingly being framed not as 'do you recognise the organisation's strategy as being like one of the following....', but as 'to which of the following four types of strategy does your organisation conform....?' - what we now would call an 'anthropic bias' (Bostrom 2002).

The second, of course, was the exploration of the validity and generalisability of the typology as contained in a large number of empirical studies. These studies generally used the research instruments outlined above, via respondent surveys, or, alternatively, used a public data base such as PIMS (Hambrick, 1983), or combinations thereof (Conant et al, 1990). The number of quantitative studies grew apace, with Zahra & Pearce (1990) summarising some 17 reported empirical studies of the typology in the

decade 1980-89. Thus the original typology was extensively operationalised and quantified with synthetic measurement instruments. The empirical studies either converted these measurements into means of assessing hypotheses against the resulting regression and analysis of variance test statistics, or using cluster analysis (Ketchen & Shook, 1996) to suggest configurations that conformed to the types detected. Other, more qualitative studies probed the typology with direct research within organisations and the management team (Hambrick 1981). And yet others combined both qualitative and quantitative approaches. The overall results of these empirical investigations are, disappointingly, too ambiguous to attempt a summary. However, as explicated below, the net effect of this research activity was to reify the types, much as the development of IQ tests had reified notions of intelligence.

#### Instrumentation via self-typing paragraphs.

An example of a self-typing paragraph (for the Defender type), as provided by one of the original proposers thereof, (Snow & Hrebiniak, 1980), is given below;-

*‘Which one of the following descriptions most closely fits your organization compared to other firms in the industry ?*

*Type 1: This type of organisation attempts to locate and maintain a secure niche in a relatively stable product or service area. The organisation tends to offer a more limited range of products or services than its competitors, and it tries to protect its domain by offering higher quality, superior service, lower prices, and so forth. Often this type of organisation is not at the forefront of developments in the industry – it tends to ignore industry changes that have no direct influence on current areas of operation and concentrates instead on doing the best job possible in a limited area.’ (Snow & Hrebiniak, 1980, p 336)*

A number of observations immediately follow. The first, is that the type has become even more separated from the environmental enactment conceptualisation of the original work; there is here no direct mention of the top management team’s responsiveness to a changing environment. Second, the type has been characterised or re-defined with marked resemblance to, but using quite different terms from, the 1978 original and its precursors. Arguably, a comparison with the paragraph descriptor given on p 29 of the 1978 book (see Appendix 1.1.C) and that printed directly above leads one to speculate that the two could plausibly be offered as alternative types of narrow scope

organisations (same genus, different species). Third, and most significantly, the whole nature of the exercise is self-confirmatory. This is explored further below.

The clear implication of this format is that there are reasons for believing / knowing that these types exist and the task is simply one of recognition and appropriate categorisation. Given the choice of just four types and their seemingly authoritative source it would take a strong sense of total inapplicability for the respondents to reject the types as simply unrecognised or invalid. The absence of 'not applicable' or 'none of the above' response creates the classic salesman's closed question situation ('would you rather buy our deluxe, or the standard version?'). The innate 'psychological essentialism' described by Gelman (2003) and others is here compounded by the psychological tendency for people to trust statements that come from and are delivered by an authoritative source (Nisbitt & Wilson, 1977). The tendency will be to 'force fit' a fuzzy reality into the most plausible match; but this is far from an affirmation that the typology stands confirmed. Above all, the anthropic bias of this technique is reinforced by the closed segmentation of the strategy continuum in the absence of that fifth choice of 'not applicable'. The respondents have replied, but there is no telling how willingly or unwillingly they accepted the limited set of options available to them. Nor can one tell the degree of conformity with which the categorical boxes fit their perceptions of reality. Whether a non-respondent in a self-typing survey had not complied with the exercise on grounds of its perceived irrelevance is not known. But it should be noted that where data for inter-rater or inter-method correlations from those who complied with such surveys is cited, it is unimpressive. This latter point is explored further below.

The 1978 book describes how difficult it was for Henry Coleman (who employed the self-typing approach) to obtain confirmation of the typology when using executives to provide third party typing. This is confirmed in Snow & Hambrick 1980. Donald Hambrick had taken his Ph D at Pennsylvania State University with Charles Snow, and their joint paper discussed four different approaches to measurement of organisational strategy, including self-typing. They observe that Coleman's study of 27 food-processing companies and 22 electronics firms (1978 book, chapter 12) encountered resistance in classifying their own organisations and sometimes lacked sufficient information to classify other firms in a different segment of their industry. In the light of this, Alan Meyer's study of hospital administrators (1978 book, chapter 13)

had deliberately confined itself to ‘hospitals that were geographically proximal and generally homogeneous in services’ and had found that many were ‘reluctant to classify their own hospitals because of their perceived uniqueness’. (Snow & Hambrick, 1980 p533). Conant et al, 1990, used two approaches to classifying strategy to the Miles and Snow typology in a single industry – Health Maintenance Organisations in USA (again, a fairly homogeneous segment) – and found that the two methods (self-typing paragraphs and multi-item scales) gave different categorisations for 67 out of 150 of the organisations that responded to the survey.

Given, as was discussed in Section 3.3 and Section 4, that the typology is not exhaustive, and was acknowledged by the authors as incomplete, the fact that conformity and consistency are somewhat compromised is not unexpected. However, the broad generality and simplicity of the approach was such that, the principles and practice of self-typing having been established, subsequent researchers were able to develop self-typing paragraph wordings bespoke to their studies. (e.g James & Hatten, 1995; McDaniel & Kolari, 1987; Zajac & Shortell, 1989.).

#### Instrumentation via multidimensional attributes.

The alternative to ‘gestalt recognition’, as in the self-typing paragraph, is recognition via ‘attribute configurations’. This is an explosive decomposition of the types into distinctive positions or values along a number of attribute dimensions assembled into a particular form that is deemed representative of each of the types. This categorisation is, thus, achieved via a research instrument that measures a number of organisational attributes (priorities, resource allocations, structures, processes), taking the typology as being polythetic. Here, the form of analysis can be twofold. Both require that the various properties or attributes along which the types can be identified and listed on some enquiry instrument. This is usually a questionnaire with measurements provided by a Likert scale, although some quantification is possible, especially as regards the performance data normally associated with such research. Then:-

(A) Either the investigator predetermines the appropriate measure for each type on each attribute, with justification thereof based upon some exegesis of the 1978 text

and/or its subsequent treatment in the literature (e.g. Conant et al, 1990; Hambrick, 1983; Snow & Hambrick, 1980). Again the problem of the reliability of such data is evident. For example, in the Conant et al 1990 study referred to above, an 11 item scale was employed following extensive trialling of questions. On a test-retest with 47 of their sample they found that the reliability of these 11 questions being answered the same way by the same respondents on each occasion ranged from 0.56 to 0.82, with a mean reliability of 0.69.

(B) Or, it can be that, having determined the attributes to be measured via some 1978 textual justification, the selection of the co-variants is provided by a statistical package creating ‘clusters’ of compatible measures which, with, generally, some off-line adjustments approximates to the types (e.g. Hambrick, 1984(a) and (b); Desarbo et al, 2005, 2006). In fact the latter study is interesting in that, by using what the authors describe as a ‘constrained finite-mixture structural-equation methodology’ the claim is that strategic types can be derived empirically, i.e. entirely by taxonomic methods, in a manner that provides better fit to the sample firms than provided by the Miles and Snow typology. This work is discussed further in Section 7.2 below. The use of cluster analysis in strategic management research was examined by Ketchen & Shook (1996). Their conclusion was that the technique was more dependent upon researcher judgement than was commonly recognised (i.e. was less ‘objective’ than claimed) and that it should not be used in isolation.

#### Consequences of Instrumentation.

If one construes ‘the Miles and Snow typology’ as a typology rather than a taxonomy, then a self-typing paragraph is more meaningful in terms of utility. (A ‘good’ classification is one that enables useful inferences to be drawn about the entities identified to the classes concerned). This is perhaps best illustrated by consideration of intentionality in classification. One can characterise the distinction between classification via self-typing paragraphs or via attributes as similar to the distinction drawn by Searle (1999) regarding the ‘direction of fit’ of intentional states and as reflected in his development of G E M Anscombe’s shopping list analogy. The proffered self-typing paragraphs act as items on a shopping list and place the obligation on the respondent to make the messy world fit its simplified and ordered representation.



It is a world-to-list direction of fit. With attribute measurement classification, however, the direction of fit is that of (attributes) list-to-world; the parallel being the check out cashier who simply records the items as they appear on the conveyor. The resulting list of shopping is an accurate representation of the particular shopping basket's contents, and hence DeSarbo et al's justified claim that their taxonomic approach is more accurate than the typology. However, from a utility perspective such accuracy is immaterial, if no extension beyond the sample population is possible. Accuracy has been gained at the cost of utility. (See 7.2 below).

Instrumentation, as described above, has had its consequences for the research community. The net effect of employing self-typing paragraphs or attribute measurement instruments was as follows:-

- (i) The opening up of the types and their attributes to interpretation and possible modification by the individual researcher. They had become public property.
- (ii) A parallel reification of the types as concrete and existential reality rather than as abstract idealisations of that reality. Concepts had become percepts defined by tick boxes or measures, themselves more concrete than the abstractions they represented. They became tractable in quantitative research in the strategy field.
- (iii) Closure of the typology at four maximum, as exhaustive of available business strategy types (whereas Miles and Snow had implied this was an interim finding of the most obvious results from their investigations to date and allowing for modification in the light of development in economic and organisational settings).
- (iv) Yet a permissive, at times dismissive, approach to the typology's origins (and the adaptive cycle), allowing individual researchers to drop one or two of the types (usually the Reactor and / or the Analyser) if it suited their perceptions, or research objectives. The typology became what

others made it to be, whilst calling in aid the authority of Miles and Snow and their research.

- (v) Inappropriate usage verging on abuse (as explicated below in Section 10).

### The Missing Algorithm.

It is of interest to note that a third method of type recognition ~ that of the algorithm, or decision tree ~ was not found in the literature. There is a possible underlying algorithmic interpretation to the presentation given, for example, in figure 4.1. above, in the sense that the ‘dimensions’ could be substituted by decisions – Environment:- Stable or Unstable ? and Response:- Proactive or Reactive ? This could be further extended to the richer characterisation provided in the 1978 book, as in – Scope:- Narrow or Broad ? Innovation:- Leading or lagging ? etc, etc. Thus a dendrogram or decision tree could be produced that is based thereon and providing a handy recognition guide to the types (and maybe revealing additional types). The consequences would be that the types would appear fairly clear cut and mutually exclusive. This is broadly the method employed in the biological sciences. The great problem in the social sciences is that homogeneity is not the product of the relatively stable forces found in the natural world. The boundaries between social abstract kinds are not clear cut, and types are seldom entirely mutually exclusive. They are what Smith and Medin (1981) refer to as probabilistic categories. Any attempt to apply algorithms would simply transfer the problem of identification to the branching points, and the holy grail of reliable intersubjective classification is still unobtainable. It is not surprising, therefore, that there is no Miles and Snow recognition chart, decision tree or similar device (albeit the subsequent treatment of the reified types might lead one to suppose that a simple decision tree was possible to construct).

### The problematic outcome.

It is difficult to see exactly what contribution these studies of the typology are providing in return for the brain power absorbed therein. In nearly all of these studies the question of the ‘validity’ of the Miles and Snow typology and its predictions is central. This gives rise to the further question of exactly what it is that these studies are

attempting to demonstrate ? If it is that there are just four recognisable and generalisable archetypes that can be used to categorise business strategies, then the questions of coverage, ease of categorisation and inferential utility in decision-making would be core, rather than peripheral observations:- ‘Do any of these four...?’ (rather than ‘Which of these four....?’). Or, ‘Would you add to these four...?’ ‘Do you find it useful to discuss strategy in the light of characterisation using these four ....?’, ‘Can you recognise your competitors against these four....?’, ‘Does knowing that one of your competitors is one of these four types help you to...?’ etc. Secondly, the studies have tended to be driven by the search for ‘success’ in strategising and, thus, concern themselves, not with recognition and use of the typology in strategising, but with the relative performance of the different types. This resolves into the investigation of ‘equifinality’. Neither direction proves particularly convincing when the questions are couched in the wrong terms.

The kinds of the natural sciences are investigated as pure (i.e. refined) samples in closed systems. One sample of copper sulphate is pretty much like all other samples of copper sulphate. But this does not apply here, and the use of the sort of mathematical ‘proof’ used in the natural sciences is incommensurable with the very nature of the social kind (organisation and its strategy) being classified. However, IF, on the other hand, a social kind IS being recognised in the Miles and Snow typology, then it is the motivating ‘adaptive cycle’ that is scientifically interesting. It may be that in positing this device Miles and Snow are reflecting actual mechanisms and causal structures that give rise to similarities of essence, despite immense variety of forms, that is the genuine heart of the adaptive fit between an organisation’s structure and strategy and its environment. If this is so, then an accommodation between our epistemic practices and the ontology of our subject is achieved such that the types are proper kinds. It is only when we have identified a proper kind that we can even contemplate employing the aggregative, quantitative methods employed in the natural sciences.

The overall problem that besets this treatment of the typology by the academy, and here one must include Miles, Snow and their fellow authors, is that the construal of the typology appears to have been as if there were a claim to an established and tacitly proven motivated kind observed in ‘nature’, or, here, ‘society’. Here the relevant social context is the apparently highly heterogeneous ecology of organisational strategies,

wherein Miles and Snow had discovered or ‘revealed’ the existence of underlying homogeneous kinds. Kinds that exist ‘out there in nature / society’. Instead of probing the postulated homologating forces that gave rise to these homogeneous characteristics, it is the claim itself that is examined. It is no more possible to ‘prove’ the Miles and Snow typology in this manner, than it is to prove ‘abstract impressionism’ or ‘cumulonimbus’ or ‘socialism’ or, for that matter, the merits of this thesis (Taylor, 2003). Consider the following :- business strategy can be likened to a game and can be described in terms that apply equally to a game. Board room discourse or case study text can refer to competitors, tactics, moves, stakes, positions, winners and losers, etc. Yet, as Wittgenstein pointed out, a ‘game’ is easier to recognise than to define. If the true value of the typology is to provide an intersubjective set of terms for discussion of business strategy, this entire conceptualisation of quantitative empirical research is simply misguided. The construal is a misconstrual, and the effort irrelevant to what matters.

## 10 THE MISUSES OF THE TYPOLOGY.

In addition to the underlying misconstrual of the Miles and Snow typology referred to above, the review of the extensive literature revealed instances of what can only be regarded as, at best, poor practice and, at worst, an abuse of the typology. This seems to arise even in some peer reviewed journals that are well regarded within academe. To illustrate the nature of these misuses of the typology two particular (and somewhat egregious) illustrations will be used; one from the UK and one from USA. The first is simply misuse, the second combines misconstrual with paradoxical claims for a ‘superior’ classification.

### 10.1 Misuse – Andrews et al.

This is a fairly recent paper by four UK academics based in Wales ~ Andrews et al, 2009, with the title ‘Strategy, Structure and Process in the Public Sector: a test of the Miles & Snow model’ published in a refereed journal, ‘*Public Administration*’. The Miles and Snow typology is central to this research, but, as shown in Table 6 below, their version of Miles and Snow’s work and the application of the typology they are purporting to test is unrecognisable when compared to the original:-

TABLE 4.4 ANDREWS ET AL, 2009 cf MILES &amp; SNOW 1978.

<u>Andrews et al 2009.</u>	<u>Miles &amp; Snow, 1978.</u>
<u>Organisations:</u> 17 Welsh local authorities, 2003-4.	Various USA private enterprises, 1972-6.
<u>Respondents:</u> Heads of Service & middle managers Via questionnaires.	Investigatory team and CEOs of businesses, via interviews.
<u>Strategies:</u> Departmental; in context set largely by Welsh Assembly Government.	Unconstrained organisation-wide strategies within market contexts.
<u>Typology:</u> 3 types (excludes 'analyser')	All 4 types.
<u>Strategic Goals:</u> Solution to 2 managerial problems ~ the 'entrepreneurial' and 'administrative'; (within policy-constrained choices).	Solution to all 3 problems of the 'adaptive cycle' (with relative freedom of choice).
<u>Investigating:</u> Departmental strategy; centralisation v decentralisation; planning processes.	Whole organisational configurations of strategy, structure and processes.
<u>Emphasis:</u> Implementation of strategy.	Formulation of strategy and structure.

Source Author based upon Andrews et al 2009 and Miles & Snow 1978.

In fairness, it is accepted that there is an absence of a strategy typology of equivalent status in the public sector, but this hardly justifies the application of the 'Miles and Snow typology' to such an entirely different context in order to investigate an entirely different set of considerations. Nor to label it a 'test' of the typology. The table above indicates that almost all aspects of this work demonstrate differences of substance between Miles and Snow and Andrews et al. Their conclusion states;- *'Our evidence shows that public organisations can have consistent strategies which fit the Miles and Snow categories. However, the fact that the processes of formulation and implementation are only loosely coupled to strategy content contradicts one of the central elements of the Miles and Snow model. Thus, while our analysis implies that the model can furnish valuable insights into strategy in the public sector, it appears to be unable to account for potential linkages with important internal characteristics.'* (op cit p 746). This amounts to a claim that the labels 'defender', 'prospector' and 'reactor' can be associated with analogical strategic behaviours exhibited by local authorities in

Wales, but that they lack associations with the characteristic strategy formulation processes and the organisational properties described by Miles and Snow, i.e. there are resemblances, but these can only be superficial. It is a metaphorical relationship that is being reported, and such is our human capacity for analogy and metaphor that almost any classification scheme can be projected in such a manner. For example to describe strategy formulation as 'calm' or 'stormy' is hardly an application of the Beaufort scale. Andrews et al have simply carried bricolage too far to yield a useful conclusion as regards Miles and Snow's typology to describe their work as 'a test' thereof.

This article also illustrates the circularity or self-referentiality of conclusions that is found in other work. Here, for example, respondents' replies were coded such that 'Reactors' were classified by a strong positive response to three questions on the research instrument:-

- a) There is no internal pressure to create or develop strategy.
- b) There is no discernable strategy process.
- c) There is no discernable approach to implementing strategies in our area.

They present results with the observation that; *'Our findings on the strategy formulation processes of reactors are given further weight by the results of the strategy absence variable. This is associated positively with reactors and negatively with both defenders and prospectors'*, (op cit p744), in a context which makes no acknowledgement of the fact that the results are a consequence of their method of category determination. The anthropic bias of such methods is unrecognised. Yet the results are subject to the use of tests for;- non-response bias; common methods bias; priming effects; interclass correlation coefficients; t-tests; Cronbach's Alpha; variance analysis, etc. In fact the paper devotes about three times as much to data methods and results as it does to the model and concepts, including six hypotheses. There is little clarity about the nature of the phenomena of interest or concepts employed in this work. There is very little exposition of the differences shown in Table 6 above. Anyone not well versed in the Miles and Snow work, its background and its nature, is likely to take the authors' heavily adapted version at face value.

Like much public property, the Miles and Snow typology can be abused in the absence of some effective policing (a job usually assigned to the peer review process). If this work tells us anything, it tells us that there is a woeful dearth of generalised classification schemes suitable for research into strategy within not-for-profit and public organisations. It also tells us that no amount of statistical method can compensate for an inadequate characterisation of the phenomena being investigated and an inappropriate frame of reference for that analysis. It might also suggest a weakness in the peer review process where, for example, the domain of origination of a conceptualisation, with its associated classification scheme, and the domain of its application, are significantly different.

## 10.2 Misconstrual and paradoxical claims – De Sarbo et al, 2005 & 2006.

This work, reported in two major journal articles ~ DeSarbo et al (2005), *Strategic Management Journal*; and DeSarbo et al (2006), *Management Science* ~ is an attempt to apply statistical methods to strategy classification such that empirical clusters can be identified that outperform the application of the Miles and Snow typology to the same data set. The claim is that DeSarbo et al have achieved this. It is taxonomy versus typology. It is, in some respects, profoundly misconceived and miscommunicated.

The taxonomic approach, in particular with regard to biological classification, was strongly advocated in the 1960s and 1970s (see, especially, Sneath & Sokal, 1973) with the advent of economic large scale data analysis via computers. This approach was termed ‘systematicist’. The prime statistical method being multivariate cluster analysis of a large number of attributes of biological specimens and establishment of consequential polythetic groups at all levels down to species and even varieties... “Organisms are placed together that have the greatest number of shared character states, and no single state is either essential to group membership or is sufficient to make an organism a member of the group.” (Sneath & Sokal, 1973, p21). In management science it was Bill McKelvey who, drawing upon biological sciences, did most to advocate the adoption of systematics in organisational classification (seen as complementary to the population ecology work associated with Hannan & Freeman, 1977). McKelvey presented systematics as a prerequisite for a scientific approach in the field of organisations (see, particularly, McKelvey, 1975, 1978, 1982), whilst conceding

that *a priori* classifications such as simple typologies have higher predictive validity and ‘are very useful but only when the particular attribute they include is of interest’ (McKelvey, 1978, p 1429).

There is an apparent resemblance between DeSarbo et al’s cluster analysis approach and Boyd’s homeostatic property clusters (as described in Chapter 2 above), and it is the intention of this critique to tease the two apart. This is an important task, since Boyd seems to offer a productive approach to understanding organisational or strategy classification and yet DeSarbo’s work is arguably a cul-de-sac. The problem is as follows:-

First, the DeSarbo et al claim in the 2005 paper :- ‘*We compare the Miles and Snow typology to the classification empirically derived utilizing this combinatorial optimization clustering procedure. With respect to both variable battery associations and objective statistical criteria, we show that the empirically derived solution clearly dominates the traditional P-A-D-R typology of Miles and Snow.*’ (2005, Abstract extract). And, in the DeSarbo et al 2006 paper;- ‘*We devised a constrained finite-mixture structural-equation methodology and empirically derived a four-group, “mixed-type” strategic typology. We find that our typology improves on the M&S typology in terms of statistical fit*’ ( 2006, p922). Neither claim should in any way discomfort Miles or Snow. It is always possible to produce a bespoke *a posteriori* taxon that more closely fits a small sample than a generalisable *a priori* category. My ‘five metal-legged, soft seated, curved, green hessian-like covered’ fits the chair I’m sitting on like a glove, and a lot better than the Concise OED definition ‘separate seat for one, of various forms.’ But so what ? It is a sine qua non of any postulated category that it be projectable. That one can sensibly predicate a category as covering some sets of (concrete or abstract) entities in an abstract and generalised sense is how classification serves human purposes. Thus, ‘a £2 coin, plus two 50p coins, plus one 20p, three 10ps, and two 2p pieces’ is a very precise description on the contents of my pocket. But that is not a projectable classification. Whilst ‘loose change’ is. DeSarbo make no generalisable claims for the taxa they generate other than the fact of more closely fitting a collection of firms in their sample than do the Miles and Snow types (as instrumented by them).



Secondly, let's look at the taxa that DeSarbo et al produce. The 2005 paper analysed extensive data from 709 manufacturing firms; 248 from Japan, 216 from USA and 245 from China. They looked at the correspondence between their four statistically-derived clusters and those derived from their operationalisation of the Miles and Snow typology. Their 4 'derived strategic types' are given as follows:-

Group 1 – 230 firms:- composed 52% of Prospectors, 32 % Analysers and 16% Defenders; but, significantly, Group 1 comprises almost entirely Asian firms ~ 110 Japanese and 108 Chinese firms, with just 12 Americans.

Group 2 – 185 firms:- composed entirely of Defenders (55% ) and Reactors (45%) and spread fairly evenly between all three countries.

Group 3 - 104 firms:- composed of a mix of Prospectors ( 26%), Analysers (43%), Defenders ( 27%) and some Reactors (4%): but, very significantly, Group 3 is comprised 100% of American firms.

Group 4 – 190 firms:- composed of 45% Prospectors, 54% Analysers and 1 firm typed as a Defender. Again this group is very evenly spread over the three countries.

Further, as well as DeSarbo et al's focus upon strategy types, they also examined strategic business unit capabilities and perceived environmental uncertainty and how all these factors interrelate with firm performance. First, some comments on their (clunky) labels and the associated descriptions of firm characteristics and relative strengths and weaknesses are offered below (observations on performance follow):-

Group 1. '*Asian-based prospecting firms with technology strengths*'. Note that, despite the label, this group is almost half (48%) composed of non-prospectors. But as 'prospectors' the description of their capabilities is also somewhat unexpected; viz; '*They possess relative weaknesses in marketing, market linking and management, which would seem to limit their ability to respond quickly to market changes; however, they operate in relatively uncertain markets [see on], competitive and technological environments, which may mitigate the need for strength in market linking.*' (op cit, p 62).

First, it should be noted that the ‘uncertain’ environment facing this group is shown in their Table 4 as the most certain, ~ this group operates in the most stable market and competitive environment and the second most stable technological environment according to Table 4 of DeSarbo et al 2005. It is assumed that a typo has crept in here and, on this assumption, the assignment of ‘prospector’ rather than ‘defender’ is squarely at odds with the Miles and Snow conceptualisation of responses to environmental uncertainty as shown in Table 2 of this chapter. The observation that these firms lack strength in marketing and are unresponsive to market changes is also totally contrary to the conventional interpretation of ‘prospectors’ in both Miles and Snow 1978 and in other writers e.g. ‘Prospectors continually search for market opportunities’ (McDaniel & Kolari, 1987, p 20).

Group 2. *‘Defensive firms with marketing skills’*. Note the somewhat contradictory tensions in that title and the contrast between DeSarbo et al and Miles and Snow and the majority of other writers in applying the terms ‘defender’ and ‘prospector’ as noted above re marketing capabilities. DeSarbo et al write *‘These firms stay competitive by defending their established positions through superior marketing, market linking and management capabilities.’* (op cit p 62) This is equivalent to a reversal of the expected capabilities of defenders and prospectors as given in the Miles and Snow account. DeSarbo et al find this group operates in the most uncertain environment; again a contrast to conventional expectations based upon the Miles and Snow’s treatment. Thus, the use of ‘prospector’ and ‘defender’ in two of DeSarbo et al’s four taxa is arguably a reversal of how Miles and Snow intended these terms to convey meanings.

Group 3 *‘US-based firms with market linking and management strengths’*. A group that lacks a Miles and Snow equivalent, since all three of the functional types are well represented in this group. It is, however, entirely composed of American firms and nearly half of all US firms in the sample are allocated to this group. In contrast to the strengths associated with the group’s descriptive label, these firms are held to be *‘among the weakest in marketing, technology and IT. These weaknesses contribute to the uniformly low performance of this group on all performance measures’* (op cit p 62). Perhaps a simpler description would be ‘poor performing US companies’. (Although the date of the data gathering is not declared, the first draft of this paper was received by

SMJ in July 2002, suggesting that much of the field data refers to a period in which the USA economy was suffering in the aftermath of the bursting of the ‘tech bubble’.)

Group 4 ‘*Balanced prospecting firms*’. The ‘balance’ refers to the fact that these firms are relatively strong in all capabilities; but they also comprise a mix of national origins and are split more or less evenly between prospectors and analysers.

As regards performance;- the DeSarbo sample breaks down very clearly into two high performing groups, ~ 2 and 4 ~, and two groups that perform very poorly, ~ 1 and 3. This confounds the Miles and Snow equifinality claim. But, more significantly, the fact that Group 2 is ‘among the leaders on almost all performance measures’ is strongly at odds with Miles and Snow in that 83 of the 87 Reactors (i.e. theoretically poor performers) in the total sample are allocated to this group and they constitute 45% of Group 2 itself. But note also that DeSarbo et al’s notion of performance is comprised of 11 measures, 9 of which are subjective ratings by the respondent relative to their competitors in their principal markets against a decile scale of 0-10; e.g. ‘if you believe your sales growth is greater than that of approximately 45% of all competitors in your principal served market segment, rate yourself a 5 for the sales growth’. These 9 have been averaged in the exhibit below, together with the maximum and minimum average scores against the 9 criteria. As can be seen, the four groups are quite clearly in two reasonably tight patterns of subjective ratings. (These results may be saying as much about the psychology ~ glass half-full / empty ~ of the respondents, as providing a reliable guide to firm performance.) The other two performance measures depend upon quantitative data provided by the firms / SBUs. The first is gross margin (i.e. total revenue – total variable costs) / total revenue. This measure does not meaningfully transfer across contexts in that it reflects capital intensity as much as, or rather than, performance differences. It should not have been used as indicative of performance across a diverse range of industries and countries. The other objective measure is average ROI over past three years, and just look at these results:-

	Group 1	Group 2	Group 3	Group 4	Overall
Self-ratings (Range)	1.84 (1.19-2.27)	6.14 (5.38-6.90)	1.98 (1.69-2.63)	5.51 (5.55-7.91)	4.13 (3.68-4.55)
3 yr ROI	-1.66%	19.52%	0.06%	16.80%	9.07%

Now one possible contributory source of these incredible differences is variation in industry performance. But this is an unlikely candidate, since Table 7 of DeSarbo et al shows the derived groups to be pretty evenly spread across all industries. We are left with the conclusion that if this is a reliably measured finding, and if DeSarbo et al's groups are matters of managerial choice of strategy and resource emphasis, then the secrets of commercial success in strategising are revealed for all to see and emulate. This would count as one of the most significant empirical research papers of all time in the field of strategy, and rapid promulgation and exploitation by consultants and practitioners would / should have followed. It did not. It may be that, despite the reported strength of these findings and the prestigious publication in which they were promulgated, there was a lack of plausibility in this empirical mathematisation of strategy and the lack of any instrumentality in these methods. That, ultimately, *a posteriori* taxonomic methods alone were no substitute for deep understanding and immersive longitudinal studies leading to grounded typologies à la Miles and Snow.

The important things to register in this lengthy description are as follows:-

- 1        That it is possible to devise a better *a posteriori* 'fit' to a particular set of phenomena, than the *a priori* projection of some intensional typing. However, since the resulting categories are not projectable or generalisable to any extent, the accuracy gained is at the cost of utility.
- 2        The utility of any typology as suggesting projectables of inferential value, particularly in relation to identification and prediction, is of prime interest to both academic and practitioner audiences. There is little to recommend the DeSarbo types as regards strategic choice; one cannot select nationality as is seemingly woven into the DeSarbo classifications. Nationality is, of course, a property and one that may carry a host of associated attributes and, probably, performance implications, but it is not normally a strategic variable.
- 3        The Miles and Snow typology conceptualised the strategic responses of firms in broadly similar settings (academic textbook publication, voluntary hospitals, etc) as reflecting different perceptions of broadly the same environment i.e. as subjective

interpretations. The DeSarbo approach has slipped into a description of environments as objective settings ('these firms operate in a...') in which strategies are played out. The perceptual and sensemaking construal of Miles and Snow's types have been replaced by an unwarranted confidence in 'objective' measures of some environmental 'reality'.

4 Nationality was not an issue within the Miles and Snow research and performance was a background consideration. At face value, DeSarbo et al had reported upon two very significant findings from a major study of over 700 firms in three nations, either of which might have prompted excitement among strategy researchers:-

\* That nationality was very significant as regards strategy, competence and performance.

\* Very marked differences were detected in the performance of their four groups.

Whilst, 'forms of capitalism' and routes to highly profitable results were not the prime purpose of this work, the fact that these results were not highlighted in their presentation suggests a certain myopia in the research team and, possibly, the agnosticism or inertia of the referees involved in bringing the paper to publication. To make progress in any science requires that creative and observant scientists spot the significant from the trivial in their results and focus thereon, even if it means a diversion from the original course. The mathematisation of conceptual social phenomena may ape the natural sciences, but the ability to question and probe results and causation is a mark of true progressive science. If these results are meaningful, it is a shame that, despite their accidental discovery, that their significance was unexplored in any depth.

5 DeSarbo et al would be entitled to respond that their intention was not to promote a specific set of groups, but to promulgate a particular taxonomic methodology:- *'The research objective of this manuscript is to introduce a new quantitative methodology to derive strategic typologies empirically... Our goal is not to uncover generic strategic types that could be necessarily generalised across all time periods, industries, data samples, etc., as we believe this would be impossible to do. Rather, we propose a quantitative methodology to be utilized across any scenario in*

*order to derive strategic types for a given empirical application (e.g. for a given time period, industry).*' (op cit p 48). So, it was all about methodology. If so, it appears, as argued above, that the methodology stands between the researcher and discovery. But there is a second argument here: one would be equally entitled to claim that this critique demonstrates the futility of such an exercise ~ if a classification scheme is not projectable in any generalised and abstract sense of intension, it is immaterial that the extension is better defined. DeSarbo et al are simply mistaken that their methodology will produce more meaningful groups than any other sorting device. They have, however, produced an (unnecessarily) elaborate mechanism for producing a bespoke sorting device, even if the 'bespokeness' appears to be driven more by a statistical model rather than a human purpose. But a sorting device has many uses, amongst which would be as a possible precursor to a more detailed within-group investigation of causes, both of similarity and of performance.

In discussions of classification and kinds (natural or social) it is common to encounter a fairly dismissive treatment of 'artificial kinds' ~ simple, arbitrary groupings on attributes such as 'green things'. That is to say, categories with relatively easily discerned extensions, but devoid of common intensions (or 'essences' in much of the literature). The taxonomic approach adopted by DeSarbo et al is by way of producing a more characterised artificial kind, one that embraces many (superficial) attributes in creating the groupings or taxa. Possibly, just possibly, *a posteriori* taxonomic methods, or organisational systematics, such as proposed by McKelvey, or as practiced by DeSarbo and colleagues, may provide organisational researchers clues to the presence of underlying mechanisms or causal powers which in turn give rise to the evident homologies encountered in management studies. A sort of divining rod for types. Possibly, just possibly, these types may yield projectable *a priori* categories of value to researchers. But mathematical manipulation alone, without concomitant observational and theoretical foundations is a *cul de sac* as regards organisational and management science. This work to date is a long way from producing the projectable homeostatic property clusters described by Boyd (1991, 1999b, 2010) and extendable to social kinds such as that attempted by Engelskirchen (2011).

## 11 CONCLUSION ON THE MILES AND SNOW TYPOLOGY

It is possible to view the epistemic development of the Miles and Snow 1978 typology in two ways. Under the first, it developed from a simple two dimensional typology of 1974 / 6, to become a far richer depiction of the 'ideal' type against what are in the main a realistic and recognisable set of organisational features. In this it has become 'entrenched' within the strategy field and gained potential as an operational classification scheme for other researchers. However, this research has not been fully realised in the manner in which the original proponents had shaped and promulgated the typology and so, on the other hand, it is a less than ideal, overdetermined, scheme for a third party to absorb and apply in classifying, or characterising, an observable organisation's strategy. This is for three principal reasons; first, there is the ambiguity of making the assessment of where the organisation stands in relation to any of these dimensions - the problem of measurement and scaling. Second, is the (un)likelihood of conformity to type; since it would be extraordinarily unusual for an organisation to conform to the 'ideal' on all of the dimensional measures - the problem of identification. Lastly, the boundary conditions ~ the extension ~ for appropriate populations of organisations to be submitted to typing are imprecisely set.

Notwithstanding these observations, the Miles and Snow typology of organisational strategies has proved robust, versatile and enduring and has been used in a significant number of academic research projects requiring some strategy construct as a dimension. Somewhat perversely, it appears that the looser the characterisation and dimensioning the greater the utility of the typology. The reification of the typology into a synthetic (operational) research instrument and the achievements and problems associated with its use for research purposes have only been touched upon in this investigation. However, it should be noted, that this would repay further investigation since the 'uses and abuses' encountered in the literature invite more detailed studies and suggest a fundamental re-examination of methodologies in the social science field of strategy. It should also be noted that, albeit the typology's use in European research was never greatly significant and may be waning, there is indication in contemporary literature and citations that it is still very much a strategy classification system deployed in North American business research.

One motivation behind this examination of the origination, development, presentation and adoption (in research) of the Miles and Snow typology was to suggest a better way of presenting and promulgating any proposed conceptual system of strategy classification. One that recognises the importance of exploring and making explicit the conceptualisations or theories or empirical evidence upon which any such typology is based and is clear about the data, backing, warrants, qualifiers and exemptions (Toulmin, 1958) associated with the claimed application. This treatment of the typology was intended to also provide an illustration of a strategy classification scheme presentation. Miles and Snow's 1978 contribution has proven itself to be enduring because, presumably, it has appealed to an intuitive characterisation of what is 'out there'. In the associated literature research, however, the way in which the original typology was presented and the subsequent treatment of the concepts and the causal mechanism outlined over 30 years ago, prompts a further topic. This is a questioning of whether the desire for empiricism, the rush to derive quantitative scales and subject them to multivariate or cluster analysis, has by-passed the normal or parallel process of knowledge development which is equally important. If these types really are out there, why so? The mode of follow-up research has, in this case, seemingly been dominated by refinement and reification of the types, rather than investigation of their causality.

The engine for creating recognisable types, as suggested by Miles and Snow, is their adaptive cycle. Yet this is far less researched in the strategic management literature. (See, for example, Charles Snow's quote at the Chapter heading). Yet this subtle and intriguing, not to say magical or mythical, putative causal mechanism has been neglected in the rush to build measurement scales for conversion of a conceptual typology into a classification instrument deployed in empirical studies. Research appears to have focused on turning concepts into constructs, whilst ignoring empirical work to investigate within-organisation mechanisms and structures. If social organisations exhibit marked similarities there may / must be some isomorphic forces in play (DiMaggio & Powell, 1983) or, as argued in this thesis, some motivation behind the proper kinds we discern and denote in our linguistic practices. As treated within the literature reviewed here, however, this is like Marx's class system, without its dialectic. Or, it is as if the result of Darwin's work was refinement of the means of measurement of the beaks of birds to be found in the Galapagos Islands and elsewhere, whilst his concept of evolution fell into desuetude.



A science that critically scrutinises and selects its kinds for those where motivation can be traced makes better progress. It is possible to discount the Miles and Snow typology as an epistemic phenomenon ~ a convenient nomenclature. Yet, for all their distant roots in 1970s California, the archetypes of Defender, Analyser, Prospector and Reactor are often recognisable to students, researchers and practitioners today. Would that they were equally familiar with the mechanisms of the adaptive cycle that may, or may not, be behind their origins.

## Chapter FIVE

### PORTER'S GENERIC STRATEGIES.

*'I see my basic discipline as economics and I see myself as an economist. There are certain economic fundamentals that influence everything else and my principle initial contribution was taking some knowledge of industrial economics and for the first time bringing that perspective into the business strategy field.'* Michael Porter, quoted in Stonehouse & Snowden, 2007 p 262.

#### I INTRODUCTION – ON GENERICS

The object of this case study is Michael Porter's 'generic strategies'; an attempt to provide an intersubjectively acknowledged business strategy classification scheme. Whilst the elusive nature of 'strategy' has been elucidated earlier in this work, there is in this Introduction an examination of the polyvalent nature of the term 'generic'. It derives (indirectly) from the Greek 'genos' and the same word is often translated into English as the word 'kind'. The two words maintain similar meanings, as well as the same primordial root. Porter does not explicitly define, explain or embellish his use of 'generic' over plausible alternatives such as type / typology, yet it is clear that he regards that adjective as the *mot juste*. It was selected for salient reason. He uses it in the sense of providing a highly generalised high level category. For example, he refers to 'generic concepts for [market] entry' (Porter, 1980, p 349) and also applies 'generic' to the description of the variety of operational or functional strategies that could be applied to the nine activities individuated in his value chain schemata: - 'The labels may differ based on industry convention, but every firm performs these basic categories of activities in some way or another.' (Porter, 1986, p 13). But where, elsewhere, he uses the phrase 'generic products', in the particular context of non-branded cigarettes, he does provide an interpretation (Porter, 1985, p 7). One might, therefore, construe his use of generic strategy or generic product as identifying more than typicality; it indicates in addition some core, inner, or 'essential' property (like tobacco); distinct from the accidental properties of a particular set of strategic intentions or branded cigarettes or

proprietary pharmaceuticals. A generic to Porter is one that embraces all in its very broad class through possession of some underlying property thereof, whilst allowing for superficial variation in form. He elucidates the nature of that core essential, but leaves the user of the categorical scheme to adapt the terms to the relevant context of application.

But the word 'generic' has come into the English language via the Latin 'genus/generis', and there is a further hint at the standing of Porter's generic strategies in that more proximate derivation. For just as the term 'generic' indicates belonging to or designating a genus, as opposed to a species, so the term here indicates a hierarchical structure ~ generic strategy is a strategy designation at a somewhat elevated level, where the identifying attribute commonality is broad; one that permits a significant amount of variation of attributes at a lower, basic level. The generic terms, or hyperonyms, 'tree', 'furniture' or 'officers', which operate at one level, can respectively encompass a range of quite differentiated natural kinds, or artefacts, or social constructions of roles and positions respectively at a lower level e.g. the linguistic generic 'officers' can refer to colonels, majors or captains or all at once. Fine for the initiated, with an established nomenclature, folksonomy or definitive guide (a systematised lexicography) to the object class of things being identified. But, otherwise, leaving much to be decided by the exercise of background knowledge and judgement. A desk is clearly accepted as an item of furniture, but what of the reading lamp, or computer upon its surface? Generics, like Wittgenstein's famous case of 'game', can have ill-defined extensions. Porter covers the five chapters of Part II of his 1980 book, under a heading 'Generic Industry Environments' ~ covering fragmented, emerging, mature, declining and global industries. Thus, his 'generic strategy' is one that stands for all in its designation, whilst allowing for a significant variation among individual realisations thereof. Porter's 'cost leadership' generic strategy can embrace what may variously be termed 'mass producer' in manufacturing, 'no frills' in airlines, or 'discount store' in retailing. It is a hyperonym. So, Michael Porter's 'generic strategies' are seen here as superordinate (Lakoff, 1987) kinds of strategy classifications whereof there is some intimated core meaning, yet lacking precise and specified determining surface features or sortals.

Before leaving discussion of the meaning of ‘generic’, mention should also be made of the semiotician’s generic phrase or sentence, sometimes termed ‘generic mood’. The simple example is the generic ‘he’ where, in context, it is to be interpreted as standing for ‘he’ or ‘she’, or a generalised statement such as ‘swans are white’, where an appropriate qualifier (‘nearly all’ or ‘most’) is missing, yet normally proves acceptable. The more intriguing extension is the paradoxical generic sentence such as ‘birds lay eggs’. This is conventionally accepted as being true, whilst a claim that ‘birds do not lay eggs’ would be challenged. Yet proper consideration acknowledges that only adult, fertilised, female birds lay eggs – ‘birds don’t lay eggs’ is nearer to the truth. There are even generic phrases where the property in question is untrue for the vast majority of individuals in the salient domain, yet the phrase would conventionally be unchallenged e.g. ‘Watch out ! Sharks attack bathers’. Generic phrases are, thus, phrases that tolerate exceptions and such exceptions can be quantitatively significant. (For a thorough exploration of the psychological and semiotic properties of generic mood phrases see Cheng, 2010; Cimpian et al 2010; Cohen, 2004; and Leslie, 2008.)

Thus, we commence an examination of the ontological and epistemological nature of Michael Porter’s generic strategies from a stance that recognises:- a) that strategies are abstractions that prove elusive to pin down in terms of sharp definitions and, consequently, are problematic to generalise and categorise; b) that Porter, in conceptualising strategies, almost certainly selected the term ‘generic’ to indicate that he intended a broad, superordinate level of generalisation; but, c) may also have had in mind the connotations of essential nature, but variable instantiation, and tolerance of exceptions, that also associate with the adjectival term. In what follows, the origins and nature of Porter’s generics will be explicated first largely in his own terms. It will be further argued below, that, notwithstanding the absence of an explicit claim to that effect in Porter’s own writings, that they can be construed as motivated abstract institutional kinds. In effect, that the ubiquity of interest in, and seeming empirical plausibility of, Porter’s generic strategies might be ascribed to a mild or weak form of essentialism. This is, further, elucidated in realist terms, drawing upon simple tendencies and robust heuristics encountered in the microeconomic realm of markets. Finally, the subsequent construal of Porter’s work within subsequent research will be critiqued in the light of this analysis.

## 2 PORTER'S GENERIC STRATEGIES.

### 2.1 Framing

Michael Porter is held by many to be the most influential strategist of his generation (Argyres & McGahan, 2002; Barney, 2002; Huggins & Izushi, 2011; Nicoli, 2004; Sheehan & Foss, 2007; Stonehouse & Snowdon, 2007), having contributed many of the key foundational concepts in particular to what is now termed the 'positioning school' (Mintzberg et al, 1998). The full extent of his contribution is such that it is well beyond the scope of this case study to encompass. The focus in this section (2) is on his generic strategies, but also, given the interest in explication of origins and promulgation of strategy classification conceptualisations, the work is contextualised in the broader aspects of Porter's approach. As far as possible (commensurate with length), this first part of the case study is presented in terms that Porter himself would (it is claimed) recognise and concur. The following section (3) deals with Porter's scheme as being a cross-cutting kind that can be derived from basic economic reasoning. Then, following a re-cap, it is evaluated against the typology of classification schemes (Section 5), where it can be construed as a heuristic, as a nomenclature and also claimed as a motivated kind grounded in basic economic reasoning. The implications of this interpretation for academic research are then explored in a final section.

However, one must acknowledge that the frame of reference adopted here ~ the examination of Porter's generic strategies as a strategy classification scheme ~ is NOT the way in which Porter himself presented and promulgated his generics. This was not a typology expressly based upon some theoretical framework and much empirical study (*a la* Miles and Snow typology). Instead, it is presented in an authoritative and normative mode. He introduces the generic strategies as simply the way it is, or has to be, if you wish to succeed. E.g. *'In coping with the five competitive forces, there are three potentially successful generic strategic approaches to outperforming other firms in an industry'* (Porter 1980, p35). Or *'Though a firm can have a myriad of strengths and weaknesses vis-à-vis its competitors, there are two basic types of competitive advantage a firm can possess: low cost or differentiation.... The two basic types of*

*competitive advantage combined with the scope of activities for which the firm seeks to achieve them lead to three generic strategies for achieving above-average performance in an industry...*’ (Porter, 1985, p 11). There is in Porter’s style a lack of linguistic ‘hedges’ ~ equivocation and qualification to statements ~ that contrasts with the style of many of his academic peers and which can, to some extent, account for his greater appeal to the practitioner audience. Porter’s work reached a far greater audience in the business community than his academic contemporaries in the field. We have to look to surrounding literature and interviews to trace much of the origins and thinking that gave rise (and justification) to his nostrums cited above.

## 2.2 The basic scheme.

Since the Cost Leadership, Differentiation, Cost Focus and Differentiation Focus generic strategies set out by Michael Porter (1980, 1985) as quadrants or ‘boxes’ are so well known, the finished product, as shown in Appendix 2.1, is described only briefly here. Doty and Glick (1994) point out that a typology is a form of theory building or expression. This treatment deals primarily with describing the implicit theoretical underpinning to Porter’s proposition of his generic strategies; the origins or the ‘intellectual provenance’ of the strategy classification scheme he proposed. Understanding the theoretical underpinning to Porter’s conceptualisation and presentation is important to evaluating the claims and warrants that are (mainly implicitly) associated with putting up his scheme as a basis on which strategic managers might formulate their plans and predictions. These cognitive tools do not craft the strategy, but that crafting can be improved by better understanding the provenance of the tools used and the ends to which they were designed (Pidd, 1996).

Porter contextualised a firm’s competitive business strategy as being directed at achieving above-average profit for its industry / sector. He positioned strategic choices here as being located in two dimensions:- a) the basis upon which it seeks to compete, whether that is achieving lower costs or higher prices (differentiation) than equivalent contenders; and b) the scope of the marketplace contention, whether that is broad or narrow (focus). He argued that these choices should be wholehearted, and that failing to concentrate strategy upon one or other of his positions would result in the firm becoming ‘stuck in the middle’ and earning sub-optimal profits. There is a logic to

Porter's claims that is part overt in his work and partly drawn from unstated presuppositions about the nature of competition drawn from economics. It is this underlying motivation towards homogeneity despite heterogeneous markets, firms and business environments that provides the ontological base for Porter's generic strategies. This is explored next.

### 2.3 Porter's theoretical background and understanding.

Porter studied first as an aeronautic and mechanical engineer (Princeton University, 1969). He took an MBA at Harvard Business School (1971) and then entered Harvard University's economics department to take his PhD in Business Economics, eventually returning to the Business School to take the MBA class in Industry and Competitor Analysis. Whilst at the economics department Porter had collaborated with Richard Caves on a number of papers dealing with industry structure and entry barriers (Caves & Porter, 1977, 1978). Thus, Porter, seen by many in HBS as an economist (Argyres & McGahan, 2002), carried into that arena a logical, positivist and quantitative approach associated more with conventional econometrics than organisational and management science. In particular, he acknowledges the intellectual foundations of 'Competitive Strategy - Techniques for Analyzing industries and competitors' (1980) as being in that branch of economics termed industrial organisation (IO) and particularly the works of Edward Mason and Jo Bain (Foss, 1996). This is often referred to as the Structure → Conduct (strategy) → Performance model; where industry structure constrains the choices and behaviour of the firm and, thus dictates performance in terms of market shares and profitability. Porter (1981, 1983), sought to integrate these theoretical constructs from economics with the case study material familiar to his classes at Harvard Business School and to re-cast this material in a new way with new models and frameworks.

This was not all one way traffic. For example in his 1998 Introduction to the re-issue of his 1980 work, Porter suggested that his work had served to signal '*a new direction and provide an impetus for economic thinking...[and]...identified a range of phenomena that economists, armed with game-theoretic techniques, have begun to explore mathematically for the first time.*' (ibid, p xi). In particular, Porter reoriented the approach of economists to IO. He offered a new, alternative viewpoint. A perspective

that moved away from the top down public policy issue of promotion of competition and removal of ‘excess’ profits, where firms were seen as homogenous entities comprising the ‘competitive forces’ to be promoted and encouraged by policymakers. A perspective that recognised instead that an industry may contain distinct sets of firms that competed in similar ways to one another, but differently to other sets within the same industry; these ‘strategic groups’ (Porter, 1979) followed different strategies (Hawes & Crittenden, 1984). This newer viewpoint was that of strategic management. It was that from the bottom up: managers in heterogeneous firms facing competition and striving to achieve distinctive ingredients of success, higher profits and to prevail over competitors. *‘In my theory, managers had important latitude to influence industry structure and to position the company relative to others’*. (Introduction to 1998 edition of ‘Competitive Strategy’ p xi). So, in his own contribution to the economics literature Robert Caves was influenced by his protégée, as much as by economists such Edith Penrose, Oliver Williamson or Joan Woodward (see, for example, Caves 1980; Caves, 1984; and Caves & Williamson, 1985).

But, Porter’s own thinking about strategy as a whole had been profoundly influenced by the economic framing provided by his earlier industry and structure studies. Both his 1980 and 1985 books represented a somewhat novel style. Drier, less personal and more generalised (despite the numerous organisations he draws upon to illustrate his points) than the ‘how to’ books for practitioners. Yet lacking the usual qualifications, reservations and credentialising found in conventional academic textbooks. Porter’s presentational style avoids hedging sentences. This is how it is, or has to be. Nor does he present his work as a hybrid of economics with business strategy, yet, with only a few changes of style (and more mathematics), the content of both books could equally have been presented as contributions to the field of IO. This is illustrated by examination of his 1980 book’s chapter titles ~ ‘The structural analysis of industries’; ‘a framework for competitor analysis’; ‘structural analysis within industries’; ‘industry evolution’; and his associated descriptions of strategies in particular industries described over five chapters as ‘Generic Industry Environments’ in Part II. These can all be attributed to the conventional understanding of markets and microeconomics that permeated the IO literature and his own writings for academic journals. A heritage that Porter was very willing to acknowledge. (See Porter 1981, 1983, 1980/1998 Introduction, plus Argyres & McGahan, 2002; Stonehouse &



Snowdon, 2007).

However, the particular theoretical underpinning to his generic strategies is less overtly in this foregrounded IO work, and can be traced to more basic economic principles, heuristics, or stylised facts, to do with the output of the firm in a competitive market. This will be explicated in section 3 below. However, there are three other important aspects of Porter's presentation of his generic strategies that should be outlined here first; those of 'scope', 'stuck in the middle' and 'equifinality'.

## 2.4 Scope & Focus.

The horizontal axis of Porter's box diagrams is the framing of decision-making by those that set strategy for a firm as regards the basis upon which it will seek strategic (1980) or competitive (1985) advantage ~ low cost or differentiation

The second frame of his presentation, the vertical axis, is the consideration of 'scope' - the range of markets served. The dichotomy of the vertical axis in the 1985 text is expressed as 'broad target' ('industrywide', 1980); - that is to say, serving all potential customers of the industry concerned; - or 'narrow target' ('particular segment only', 1980) - that is to say, selecting and serving an identifiable segment of customer demand only. Segmentation can be by geography, or customer type, or product range. Porter gave the latter strategic decision the label 'focus strategy' and describes it throughout both texts as the generic strategy of focus. *'By optimising its strategy for the target segments, the focuser seeks to achieve a competitive advantage in its target segments even though it does not possess a competitive advantage overall.'* (1985, p 15). Note that Porter describes focus as one of the three generic strategies. This in contradistinction to those subsequent researchers who interpret the 'focus strategy' as being immediately sub-divided into two, giving four generic strategies in all. The decision is that of scope; the strategy is that of focus and, the emphasis is upon the bringing to bear concentrated attention and resource to the targeted market. Albeit recognising that this third strategy came with a choice of focus upon reducing costs or focus upon increasing customer willingness to pay a price premium.

The underlying theories regarding the causal processes involved ~ to be explored further in section 3 below ~ are respectively; a) scale economies of various

sorts; b) recognition of the propensity of more affluent customers to pay a price premium for an augmented product or service; and c) the enhanced effectiveness of resource and competencies when brought to bear on a particular customer's needs. A contributory rationale for introducing this second dimension of scope may also lie in the empirical results of studies of the relationship between market share and profitability. This will be explored further in the next section.

## 2.5 'Stuck in the Middle'

According to Porter a firm that compromises its choices between the three generic strategies and fails to achieve any of them is 'stuck in the middle'. He comments; *'The firm stuck in the middle is almost guaranteed low profitability. It either loses the high-volume customers who demand low prices or must bid away its profits to get this business away from low-cost firms. Yet it also loses high margin businesses – the cream – to the firms who are focused on high-margin targets or have achieved differentiation overall.'* (1980, p 41-2). He argues that this suggests a U-shaped relationship between profitability and market share, where the largest and smaller (focused or differentiated) firms achieve higher return on investment than their middling-sized competitors. The treatment being extended further in the 1985 book, with discussion of specific examples of firms both failing to avoid being stuck in the middle and of large and small firms achieving success where their competitors are stuck in the middle.

At the time these books were being written, the results of the on-going PIMS (Profit Impact of Marketing Strategies) programme and other empirical studies that were coming into the public domain, seemed to show that companies with both high and low shares of the total market could out-perform middle ranking firms. This practical finding, confirmed, at one end, the predictions of economic theory concerning imperfect or monopolistic competition, but, at the other, required further explanation. Porter's generic focus strategy, plus the stuck in the middle phenomena provided a model and accompanying explanation that recognises that smaller firms can take a relatively large share of their served segment or niche, and combines this with his view that success required clarity and wholehearted emphasis upon the selected basis of competition position (low cost or differentiation).

Porter's treatment of the 'stuck in the middle' position has attracted much debate between Porter and his followers who argue that firms should avoid mixed or hybrid strategies, and those who believe that a 'best-cost provider' (embracing both low cost and differentiation) is a viable (even optimal) strategy. (Cronshaw et al, 1994; Dess & Davis, 1984; Hill, 1988; Miller, 1992; Murray, 1988). The influential American strategy textbook 'Strategic Management; Concepts and Cases' (Thompson & Strickland, 10<sup>th</sup> edition, 1998) for example, describes 'The five generic competitive strategies'. They describe a fifth generic strategy of 'Being a Best-Cost Provider' yet claiming that 'the classification scheme is an adaptation of one presented in [Porter, 1980]' (op cit p 135 and 152-4). The strategy community divides over the issue of whether such 'best-cost provider' strategy is viable, and one can find subsequent quotations from Porter's work that indicate some equivocation regarding the degree to which the middling position is untenable. However, by the time of his 1998 Introduction to the re-issue of the 1980 book, Porter had not recanted from his earlier position:- *'Successful strategies require choice or they can be easily imitated. Becoming "stuck in the middle" – the phrase I introduced – is a recipe for disaster.'* (1998, Introduction, p xiv). There is here (as elsewhere in exegesis of Porter's *oeuvre*) a topic for further discussion, but that would be a distraction from our interest in the business strategy classification scheme he proposed.

## 2.6 Equifinality.

The performance implications of Porter's generics were bound to exercise those concerned with formulating and assessing business strategies. It must be recognised that, (apart from his interdiction of hybrid, middling, strategies), Porter made no claims that any of his three generic strategies was inherently superior in performance terms. Where performance relates to returns on investment or margins, rather than absolute profit. This notion of parity of outcomes, or 'equifinality', was a feature of this and other contemporary strategy classification schemes (e.g. Miles & Snow 1978). It also prompted debate in that the contingency school of strategists held that good fit between strategy and structure with the industry environment led to superior performance. There is a plethora of academic literature on both the middle position and equifinality associated with Porter's generics that has, in effect, largely substituted for discussion on the ontological basis of the claimed fundamental common strategic behaviour across

heterogeneous firms and industries. The question of whether he was offering a ‘motivated kind’ of some sort is examined next.

### 3 A CROSS-CUTTING KIND GROUNDED IN ECONOMICS.

#### 3.1 Porter’s economic grounding.

Porter’s writings are deeply influenced by his grounding in microeconomics, particularly his contributions to the IO branch thereof. Thus, for example, concepts underlying his influential ‘five forces driving industry competition’ are those derived from structural analysis of industries, replete with concepts familiar to industrial economists such as entry and exit barriers, switching costs, economies of scale, product substitution, the bargaining power of buyers and suppliers, forward and backward integration, and the like. (The concepts of switching costs and exit barriers were themselves developed substantially by Porter with Richard Caves in the 1970s - Argyres & McGahan, 2002). Moreover, he relates his generic strategies to stages of industry evolution and to strategic groups within industries. It is, perhaps, this orientation to forces external to the firm that accounts for the attribution to Porter of a school of thought that became widely known under the label of ‘the positioning school’ (Mintzberg et al, 1998). This is not to suggest that Porter was silent as to the importance of endogenous capabilities and strategies of management, leadership, resources and structure. Indeed, Chapter 2 of the 1985 book ‘The Value Chain and Competitive Advantage’ was a major contribution to formalising analysis of the internal activities of the firm, including deeper exploration of ‘scope’ decisions and organisational structure.

When Porter was interviewed in 2002 regarding the motivation behind his 1980 book (Argyres & McGahan, 2002), he acknowledges that most of the content came out of his earlier IO work. But he also indicated that his generic strategies were less foreshadowed in prior theorising:-

*‘At the eleventh hour, I tried to get at the question of how to think about positioning in a way that was fundamental and connected to competitive advantage.... The chapter on generic strategies was the last chapter to be written. Again, it involved uncomfortable territory. Business School colleagues were saying, “Too abstract” and “We can’t generalise”, while the economists*

*were saying “Where are the statistical tests ? What is the model ?” It was a very uncomfortable leap.’ (Argyres & McGahan, 2002, p 44).*

Porter’s own aspirations for this presentation was not that of the case study approach as favoured by the Business School, nor the modelling and large scale statistical approach typical of economic analysis. *‘My main body of work is what I call frameworks. A framework tries to capture the full richness of a phenomenon with the most limited number of dimensions.’* (Argyres & McGahan, 2002 p 46). But, if the grounding of other aspects of the 1980 and 1985 books was to be traced to Porter’s work on IO economics, that for his generics is not overt in these texts, albeit it comes through in the 1988 teaching video discussed in Section 3.3. below. It can, however, be set out here as being compatible with and complementary to an economic understanding of how producers cope with competitive market forces. That is to say that there are grounds for arguing that there are underlying economic tendencies at play in competitive markets that would influence the contending firms’ strategy-making such that they tend to conform to the generic strategies (and avoid the middle position).

### 3.2 Some theoretical grounding for the generic strategies.

The underpinning theory in which Porter’s generic strategies are rooted is that of a firm facing competition in a market economy. Remember that Porter is writing about ‘competitive strategy’ and ‘competitive advantage’ ~ that is to say his firms are always considering their strategic options subject to the forces of competition in their industry. These forces will be outlined here in terms of what may be considered simple A-level economic theory, or what Bruce Caldwell terms ‘basic economic reasoning’, as opposed to ‘formal microeconomic theory’, (see Caldwell, 2002 and the Caldwell / Lawson exchange in Fullbrook, 2009). That is to say a set of stylised facts of fairly robust heuristic value in understanding economic aspects of social and institutional life. The argument being that, although not explicated in his presentation, something like these presuppositions of the ‘facts of economic life’ underpinned Porter’s thought processes when ‘at the eleventh hour’ he formulated his generic strategies. There are four main general elements of basic economic reasoning to consider here.

First, a firm faces market prices for its output determined in the main by the prices of competitive offerings. This is evidently true for fungible products, but it is also roughly true for a whole range of industrial and consumer goods and services; from hammers, to hamburgers, to houses, to haircuts. Anywhere that the notion of the ‘going rate’ is a recognisable and effective constraint upon the firm’s freedom to price at will, is the product of conceptual forces that we seek to describe in economics by such abstract terms and notions as ‘price taking’, ‘like-for-like substitution’, ‘price elasticity of demand’, etc. This is not to argue that a single exact price level is specifiable; simply that suppliers face a world that works in such a way that if they overprice their goods or services, they will sell very little and total revenues will fall. If, on the other hand, they underprice they will forgo potential profit. Whichever way one construes the origins of the subset of considerations at work, the fact remains that the prevailing level of prices is a highly germane factor or constraint in deciding upon a firm’s pricing strategy.

Secondly, comes the recognition that the demand for a product or service represents an aggregation of the purchasing decisions of many customers and these customers are different in their affluence, tastes, functional and psychological needs, etc. This is reinforced by the everyday evidence that some customers are prepared to pay a price premium for goods or services that, beyond functional performance, convey features of convenience, quality, prestige, uniqueness, etc. Thus competition for customers in many markets is by no means based solely on price. Firms able to secure a price premium for their products / services that exceed the costs of adding these augmented features will earn above average profits.

Third, consider the rather prosaic fact that we tend to regard the goal of business enterprise as being to maximise long-term profits, and that profits are defined as total revenues minus total costs and that total costs comprise fixed and variable elements of various types. If a company seeks to maximise its profit margins (sustainable competitive advantage), it can logically only achieve this either i) by having lower costs than its competitors, or ii) by achieving a price premium over its competitors that exceeds the costs incurred in achieving that premium (by investment in branding, product features, service quality, etc). The former Porter labels the ‘cost leadership’, the latter he labelled ‘differentiation’ (perhaps, because the more obvious label of ‘price

leadership' had already been utilised in IO to mean something different – Pearson 1999 p 142).

Lastly, it is a matter of principle and observation from experience that any firm must decide, not only how to compete, but also where to compete. This, the notion of strategy as selecting the firm's 'mission' (Ansoff, 1968), or the solution to the 'entrepreneurial problem' (Miles & Snow, 1978), involves choices as to which segments of the market to address. A decision dimension that Porter labels 'scope'. The default position is that a firm will compete across the board; that it will define its scope as the same set of products and services, geography, demographics, etc as provided by the industry of which it is a constitutive supplier. Where, however, the firm seeks to redress certain weaknesses (generally of scale) by concentration of its resources and capabilities on serving a particular niche or sub-set of the full market, then it may, by virtue of that concentration, achieve competitive advantage of 'focus' compared to its more generalist competitors.

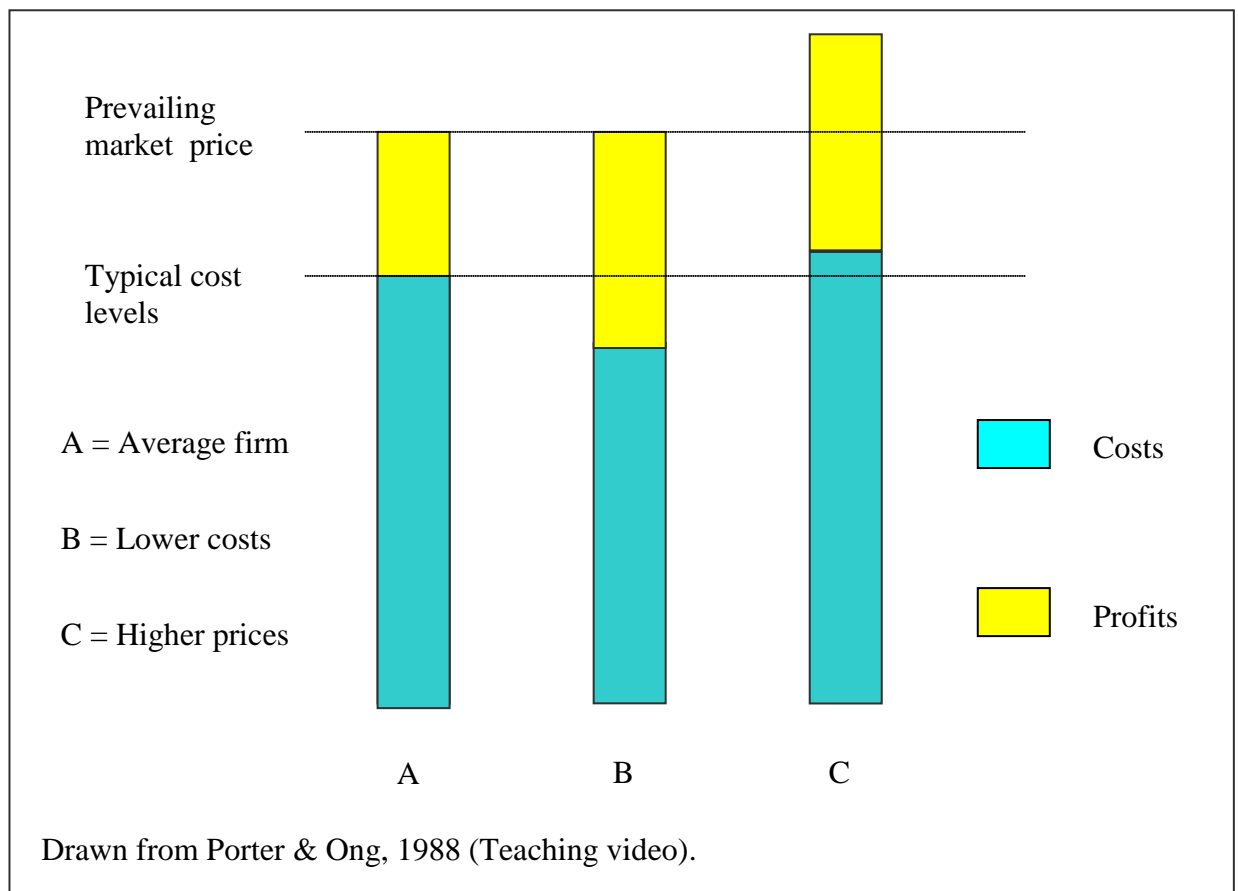
Combine the four and we end with a fairly robust argument, couched as an economic explanation, of Porter's generics that provides a plausible explanation of why such characteristic strategic behaviour may be found in different industries, emerging from the heterogeneity of firms and the multiplicity of their choices. This is to assert that had Porter associated an overt claim to this underlying motivation to the categories resulting from his conceptualisation as set out in 1980 and 1985, he would have been able to provide a plausible case. The generic kinds, on this account, are not simply matters of convenience in grouping phenomena, as in a nomenclature, but are plausibly based upon and consistent with basic economic reasoning. Reasoning that is itself cogently formulated in the light of empirical regularities of observed firm behaviour in a (broadly) competitive market ~ see 3.5 below. And, significantly, this is how Porter represented the generic strategies in his pedagogy: as is revealed next.

### 3.3 A diagrammatic representation.

The above stylised argument can be represented in a simple schematic diagram, Figure 1. This is drawn from the diagram that Porter uses in his own 1988 teaching video (Porter & Ong, 1988) and is similar to that given in the TV broadcast in the UK

where Porter explicated his concept and that figured in a discussion between himself and David Sainsbury regarding the ‘stuck in the middle’ position (Cronshaw et al, 1994). It is also similar to that given in Gordon Pearson’s book ‘Strategy in action’ (1999, p141) and the 2011 edition of Johnson, Scholes & Whittington, *Exploring (Corporate) Strategy* (This, however, owes something to my own contribution as a member of the Advisory Board to that publication.)

FIGURE 5.1. A SCHEMATIC REPRESENTATION OF THE GENERIC BASIS OF COMPETITIVE ADVANTAGE



This diagram examines the profitability of three competitors in an industry on the basis that profits = revenues minus costs for each. In the case of the ‘average firm’ (A), it incurs average cost per unit, obtains average revenues and earns average profits per unit. A ‘low cost competitor’ (B), ‘needs a good product’ and ‘prices at or near industry average’ but, by concentrating its strategy on cost reduction, incurs lower costs per unit whilst reaping the same revenues per unit and, hence, earns a higher level of profit. On the other hand, the competitor with a strategy that has invested in imbuing its



products and services with superior ability to meet particular customer needs and values can command higher prices than average. This is what Porter terms the ‘differentiation strategy’ (C). It is likely to involve some additional cost to achieve this market positioning, but Porter stresses both that the additional price premium it can command more than compensates for the additional cost, and that where the buyer is unprepared to pay extra the differentiator must cut costs to the bone.

Note the highly abstract or stylised representation of what is empirically an exceedingly fuzzy phenomenon of ‘prevailing market price’ or ‘typical cost level’. This is quite common in conceptualisations within conventional mainstream microeconomics. This representation does not show the dimension of ‘scope’ a possible third dimension of depth. The low cost competitor can address the entire market as a ‘cost leader’, or segment(s) thereof as a ‘cost focuser’. Similarly, the high price competitor can address the whole market as a ‘differentiator’, or part(s) thereof as a ‘focused differentiator’.

### 3.4 Porter’s generics as a cross-cutting kind.

Economics is conventionally sub-divided into macroeconomics ~ dealing with economy-wide phenomena such as trade or fiscal balances, interest rates, inflation, etc ~ and microeconomics ~ dealing with individual markets, industry structure, competition, etc. Porter’s generics have been situated above (Sections 3.2 and 3.3) as microeconomic generalisations rooted in basic economic reasoning.

The fact that firms in the same national / regional economy tend to conform to a very broadly similar set of norms is reflected in the fact that it is possible to contemplate and produce what is termed the ‘varieties of capitalism’ literature. But, over and beyond this, there are sound reasons consistent with the implicit ontology of IO argumentation for anticipating that firms within the same industry will resemble one another. There are strong isomorphic or homologating pressures to be found in:- the industry’s technology (capital investment, r & d expenditures, IPR requirements); its production and distribution requirements (plant and process engineering, value chain logistics); the coercive forces in the business / industry environment (customer requirements and expectations); or institutional setting (professional standards, regulations, legislative requirements); and ‘mimetic isomorphism’ (emulation of successful firms and their

strategies). Normative expectations are carried by personnel as they move between organisations within the same industry. So, similarities of structures and strategies of firms in the same industry is a pretty natural expectation. (DiMaggio & Powell, 1983; Lounsbury, 2007; Lounsbury & Rao, 2004; Oliver, 1991; Thornton & Ocasio 2008; Spender, 1989).

Furthermore, there are causal mechanisms embedded in the variety of these isomorphic forces that may cause the industry to sub-divide into ‘strategic groups’ ~ firms with similar structures and strategies to others in their group, but distinctive from other firms in the same industry but in different groups. For example:- specialist steel or chemical producers v bulk producers; ethical v OTC pharmaceuticals; supermarkets v convenience stores; low cost v full service airlines; prestige v budget hotels, and so on. Thus, competitive strategies at the industry level will manifest in characteristic ways and can be described in terms of the generic labels exemplified above or form the basis of the much-researched ‘strategic groups’ as empirical entities or theoretical constructs (see e.g. Barney & Hoskisson, 1990; Bogner et al 1996; DeSarbo & Grewal, 2008; Hawes & Crittenden, 1984; Miller & Friesen, 1986; Short et al, 2007; Thomas & Pollock, 1999). It is tempting to see these intra-industry divisions as supportive evidence of Porter’s low cost or differentiation distinction at the pan-industry level. It is certainly possible to divide many industries into groups of firms that emphasise price and functionality and those that emphasise service and quality. Indeed, Porter even briefly outlines a three-level picture of competition ~ industry against industry; strategic group v strategic group within an industry, and firms against each other within strategic groups, in a paper published just a year before he launched the generic strategies (Porter, 1979).

However, Porter’s generics describe strategies that originate within individual competitive markets, but are macro-industry in that (reasonably) competitive markets are (reasonably) widespread in Western economies. They are at a level of abstraction and generalisation above the level of the strategic group or the industry and apply at a pan-industry level, much as many other microeconomic-type phenomena incorporated into his work apply across the board. For example; threat of entry or substitutes, bargaining power of suppliers or customers, value chain are all concepts that operate at macro-industry levels. In the language of the philosophy of natural kinds, (Ali Khalidi,

1998), Porter's generics are cross-cutting kinds; or in the language used here ~ abstract, institutional, cross-cutting motivated kinds. At an epistemological level there is little to challenge about cross-cutting (institutional) kinds:- they are either useful conceptualisations or not (Thomasson, 2003), but there is a potential contribution from the ontological level to that utility (Boyd, 1999; 2010).

#### 4 A BRIEF RE-CAP

4.1 The fundamental question being assessed here is that of what kind of classification scheme is Michael Porter's generic strategies ? So far we have established the following three points:-

4.1.1 As an abstract institutional cross-cutting kind dealing with motivation and behaviour there are unlikely to be simple, procrustean, determining and determinable class properties that distinguish and sort categories (Chapter 1). Such classification schemes are likely to be thematic in nature, with fuzzy extensions and, probably, citing some prototypical exemplar as the only ostension possible. Extension is not either / or; there are degrees of centrality / typicality on a number of salient properties. With salience determined by the author / authority's descriptive treatment. Connotations, or inferential uses, may be derived from probabilities, as much as analytical usages and connections. These limitations are inherent in the ontology of the individuals (i.e. firms' strategies) being categorised (Chapters 1-3).

4.1.2 The homologies in strategic behaviour that Porter postulates are at a superordinate, cross-cutting, 'generic' level. They, thus, invite and require more contextualised construal of both intension and extension on the part of the classifier / user, and can tolerate exemptions on manifest properties. Nevertheless, Porter's formulation includes a normative element in equifinality of three / four types and the admonition to avoid being 'stuck in the middle' (Sections 1 and 2 above).

4.1.3 The implicit theoretical underpinning to the classification scheme can be derived from basic economic reasoning regarding the strategy formulation and

decision-making options available to firms operating under competitive conditions. This is somewhat under-described, particularly in the two main texts associated with its original promulgation. Porter's written style is authoritative rather than explanatory. The explication offered here exceeds that provided by Porter to some degree, yet is consistent with the more discursive presentation provided in his pedagogy. It is eminently plausible that it underpinned his thinking (Section 3 above).

## 5 WHAT TYPE(S) OF CLASSIFICATION SCHEME WOULD PORTER'S GENERICS FALL UNDER ?

5.1 From this position, we now examine the nature of Porter's generic strategies as a business strategy classification scheme with regard to the typology offered in Chapter 3: First, it is evident that the scheme does not qualify as an effective sorting device, since the types are not easily determined by superficial features. Had Porter's intention been to propose a sorting device he made a poor job of it. Sorting firms to Porter's categories is a matter of deliberation and judgement, and intersubjective agreement is by no means guaranteed.

5.2 On the other hand, it certainly works as a nomenclature. But there is little in Porter's presentation, either in text or pedagogy, that indicates he was proposing a nomenclature. Had that been the case, one would expect:- observations to precede theory; far more by way of neutral description of manifest properties ~ as a guide to recognition and observable behavioural characteristics; accounts of empirical observations based upon practical experience; greater richness in the detail of his examples; some sort of 'recognition key'. In fact, the scheme is presented in a normative, rather than descriptive manner. There is plentiful ostension to particular companies (in both texts and teaching video), but these are ideal instances, more as exemplification of principles than as the source or evidence of his relational schematic. He does not dwell upon borderline cases, contradictory attributes and recognition criteria as might be the case if he was setting out a nomenclative scheme. In Bailey's terms, (1984, 1994), this is an *a priori* typology based upon a conceptualisation of options against two dimensions, rather than an *a posteriori* taxonomy derived from the rationalising of empirical observations. Yet, perversely, and notwithstanding these

comments, Porter's generics do rank as an effective *de facto* nomenclature ~ it has caught on. Despite their rather indeterminate extensions, those labels and associated terms such as 'stuck in the middle' have surely been assimilated, or entrenched, into the strategy vocabulary.

5.3 So, the fact that Porter's generics have been taken up as a nomenclature, might point to its appeal and effectiveness as a heuristic classification scheme adopted by, and spread within, the strategy community. This is discussed next, in 5.4. But it could also point to an *a priori* conceptualisation ~ that its appeal lies in the fact that it is consistent with and draws upon some theory. That theory being postulated as basic economic reasoning about firm behaviour in competitive markets. This leads to a more challenging question: can Porter's scheme qualify as a claimed motivated kind ? This question, drawing from prior chapters, section 3 and point 4.1.3 above, is examined thereafter.

5.4 Porter's scheme certainly qualifies as a proffered heuristic classification scheme. It is not only framed in terms of decision-making options as regards scope and basis of competition, it is also promulgated in a normative manner, urging clear-cut decisions as to which of the prototype strategies to follow, and warning against failure to be decisive in that choice. Plausibly too, one could maintain that the generic strategies rest upon the heuristic nature of 'basic economic reasoning' i.e. construe the latter as no more than a structured set of folk-wisdom or common sense maxims. This is also a tenable position as regards Porter's presentation in the 1980 and 1985 texts, which rests more on assertion from a leading authority, than detailed logical argument. (Although it is more difficult to reconcile this construal in the light of his presentation in his pedagogy, which is more explicit about conceptual reasoning). One might, therefore, suggest that the generic strategies are most consistent with a viewpoint that accepts Porter's work as presenting a potential heuristic business strategy classification scheme. It is, possibly, the interpretation most consistent with the 'strategy tools' literature that views the contribution of strategic management education and training to be the provision of a toolkit for use in company strategising or case analysis (e.g. Jarzabkowski et al, 2007). The generics seem to have provided a reasonably successful heuristic as witnessed by their longevity and ubiquity within the literature. But can it be more than this ? ~ a classification that reflects some natural homeostatic force(s); a motivated kind ?

5.5 Remember that it was suggested in Chapter 3 that there is a hierarchy in the different types of business strategy classification schemes. The motivated kind is placed at the top since it allows for the greatest utility in inferential use and is more nomological or 'scientific'; the homologies are not accidental, being the product of some claimed underlying causal force(s). If Porter's generics are postulated as a motivated social kind, then that is the most significant claim to explore and critique. However, before doing so, it would help to register in greater depth the significance of the distinction between the physical and social sciences and what this means in relation to our question.

5.6 In the physical sciences the causal forces in operation are enduring and indifferent to our knowledge. Once promulgated, a motivated kind in science can be investigated and the source(s) of motivation identified, isolated and, if warranted, be given nomological status. That is the status accorded to what are termed 'natural kinds'; they behave according to the laws of nature. Furthermore, the scientific exploration of a nomenclative categorisation scheme can result in *a posteriori* elevation of a scientific nomenclature into a motivated or natural kind as the causal forces or laws governing the categories become understood (Beebe & Sabbarton-Leary, 2010).

5.7 The similarities recognised in a motivated social kind are created by something claimed as causal. A religious account, an evolutionary account, a historical dialectic account, and other reasoning as to causation could be the something put forward, and, in each case, the resulting categorisation is a putative motivated social kind. The account here considered is the socio-economic account: that a concert of forces within the particular social realm that are present and operative, irrespective of any formal recognition thereof, are (or were) responsible for the clustering of strategic behaviours such that the generic strategies provide useful categorisation. Here the case is somewhat different from one's presuppositions regarding science in respect of enduring, universal and mind-independent causation, since we are dealing with a social science and a social kind. Firstly, we are not able to experiment in closed systems and, thus, isolating or controlling causal forces and structures is not possible. Since many such forces and systems are operative, the changing balances therein provides a source of heterogeneity in outcomes. Hence, for example, the extrapolation of results from

case studies into generalisable conclusions and the use of replication studies in social science has proved highly problematic. Results will show variation over space and time. What may have been generative of the outcomes that Porter painted in the market economy of 1980s USA may not have been observable in the China of that time, nor be usefully applicable in the USA, or China, in 2012. Competitive forces can wax as markets are opened up to foreign competition, or wane as a result of mergers and acquisitions.

5.8 Secondly, social kinds can exhibit ‘looping effects’ and these are certainly in play as regards choices of strategy. Firms in the USA in 1980’s may have exhibited the clustering of behaviour patterns in their strategies that Porter has formalised in his scheme, but it may well be that, his scheme, being well-known and normatively propagated, subsequently became a further homologating force within the business community. Porter was not merely describing his types, he was recommending them. Since Porter supplied the concepts, the terminology and the authority that acted to reinforce what had been previously been indifferent to his ‘revelation’ of the types, he had in effect created a probable self-reinforcing institutional kind.

5.9 In section 3, and in 4.1.2 and 4.1.3 above, it was suggested that Porter’s generic classification can be interpreted as a cross-cutting kind grounded in economics. It was presented as the product of an implicit grasp of the underlying forces at play in competitive markets in terms of basic economic reasoning. It was only later, in the 1988 teaching video, that Porter explicated the generics in terms that are more closely related to such economic reasoning and associated terminology such as ‘prevailing price level’ or ‘average costs’. He, however, left the presupposition of firms acting in a competitive market largely unexplored. In these terms it is, therefore, possible to portray Porter’s generic strategies as constituting a claimed motivated kind, albeit that claim comes as much from this exploration of Porter’s work, as from Porter himself; except, perhaps from his less well-known pedagogic treatment.

5.10 Chapter 3 set out the characteristics of a motivated kind as:- ‘some structure of categories where the distinguishing factors in the classification of entities in the field are based upon some postulated determining force(s) that are ‘external’ or superordinate to the interests of the classifier, be they supernatural, or powers of nature or society, or

some mixture thereof. The classes are ‘motivated’ by something that we believe is responsible and is additional to a simple current interest in producing some convenient groupings. This something causes the kind to be what it is, irrespective of whether we can specify the causal mechanism(s) in question.’ The claim here now is that Porter’s generics can be accurately described as a postulated motivated kind in these terms. The external determining forces being those of competition between firms as explicated in basic economic reasoning. It is, however, important to bound that claim such that it is not confused with similar-seeming alternative construals.

5.11 The important point is that the typology in Chapter 3 is concerned with epistemic, rather than ontic, claims. The motivated kind, in order to qualify as such, must show some claimed non-trivial ontological position, regarding causation on the part of the proposer / user of the scheme or category. But to identify a motivated kind is not to commit to the veracity or warrantedness of any particular ontic position. It is agnostic, or permissive, about such claims. For example, in Chapter 3 a number of possible socio-economic frameworks for understanding the genesis of similarity in firms’ strategies were outlined:- the economics paradigm; the social sciences paradigm; the analogy to evolution; and the descriptive rhetoric of globalisation. The economics paradigm provides a close fit to Porter’s work. Nevertheless, the claim here is NOT:-

(a) That Porter’s generics are (or are not) ‘natural kinds’ of which one may predicate a necessary and sufficient determinable essence.

(b) That Porter originally promulgated his generics in a way that was overtly a claim to be a motivated kind as here described.

5.12 The claim IS that:

(a) It is possible to construe Porter’s generics as a motivated kind, where the motivation results from the causal relationships described by basic economic reasoning about the way competitive markets and management’s capacity will constrain a firm’s strategic choices and discipline outcomes.



(b) That such an account is consistent with Porter's own intellectual provenance in economics and the manner in which he explicated the generic strategies in his pedagogy. That is to say that it is a plausible interpretation in the light of what the far more generalised account of classification in the social sciences contributes to our understanding.

## 6 SOME IMPLICATIONS OF THIS CONSTRUAL.

6.1 To summarise the foregoing:- In chapter 1 it was established that there is a substantial body of thought that claims that a discipline that understands and refines its kinds will enjoy greater progress than one that neglects intersubjective definition and agreement concerning its raw material or concepts. In this chapter, it is argued that Porter was promulgating a classification system that is a cross-cutting abstract institutional kind. Its purpose was either to provide (a) a heuristic classification scheme grounded in basic economic reasoning about the choices available to a firm seeking to out-perform its rivals when facing a competitive market place, or (b) a motivated kind. A number of implications flow from this conceptualisation as explored below. Points 6.2.–5. deal with the epistemic implications of either construal. The two alternatives are then explored in 6.6 and 6.7. However, it must first be acknowledged that this thesis is about the nature of business strategy classification schemes, and it is not by way of a detailed literature review of the enormous outpourings of research papers that followed Porter's work. Observations below about the way in which academe conducted such research are based upon a substantial reading of the more well known papers, including Campbell-Hunt's (2000) metastudy, Parnell's (2006) summary and Huggins & Izushi's book (2011), but does not claim to be exhaustive.

### 6.2 Competition as an "independent variable."

Appropriate empirical work following up this formulation would concentrate upon either (i) seeking to validate the claims to some effective causal mechanisms creating the homology that Porter was describing; or (ii) following up the utility of the heuristic for strategic decision-making. Either way, the boundaries of such reasoning apply to competitive markets and, thus an important dimension to any empirical study would be the degree of competition pertaining to the case study(ies) or sample of firms.

In principle, if the reasoning put forward here is pertinent, one would expect greater conformity to Porter's typology, i.e. greater ease of discrimination in categorisation, in more competitive markets. At least as pertaining to USA firms in the 1970s and 1980s. Yet studies of Porter's generic categories appear not to have adopted a measure of competition as an independent variable.

This formulation prompts a further thought:- The IO literature, described in 2.3 above, is framed around an SCP model of Structure (of industry i.e. degree of competition therein) -> Conduct (i.e. firm's strategies) -> Performance (i.e. profitability and survival). The development described here could be represented as an alternative PSC model where Performance of firms determines those that are long-term survivors. Therefore, the industry's current Structure reflects a selection of firms whose strategic Conduct has been successful. Those firms that fail to achieve successful strategies drop out of the population leaving behind those whose strategies follow successful patterns. Porter's generics simply recognise and label this phenomena by picking out as cross-cutting kinds those strategies that work best.

### 6.3 Instrumentation.

The second issue is the development of a tool for research purposes that instruments Porter's conceptualisation. Porter did not develop one, nor propose suitable diagnostic devices for sorting firms into his categories. Although individual academics have produced bespoke questionnaires (whether self-administered or researcher-administered) for such categorisation, each seems to have developed independently and none has 'caught on' as the conventional means of sample division amongst Porter's categories. There is no equivalent of the standard research tools found in other equally abstract fields of organisational science such as Blake and Mouton's leadership styles or Belbin's team roles, both of which concern the identification of behavioural attributes every bit as generic as Porter's strategies. It is unknown whether this was for want of trying or lack of success in the task in devising a suitable standardised research tool. In fact, one of the features of a limited review of the more prominent relevant research papers, is the idiosyncratic interpretation and instrumentation of individual authors.

### 6.4 Performance implications.

Given the normative nature of Porter's promulgation of his generic strategies and the very large constituency of interest in achieving sustainable competitive advantage, it is entirely natural and predictable that a large measure of empirical research effort would concentrate upon the relationship between generic strategy and firm performance. Thus, many early and prominent papers examined questions of performance both as regards Porter's equifinality claim for the three / four generic strategies and the under-performance of firms whose strategies are 'stuck-in-the – middle'. That this effort has been largely inconclusive, with many contradictory cross-claims, has led to much debate and some equivocation in academic circles regarding Porter's generics (Campbell-Hunt, 2000; Dess & Davis, 1984; Parnell, 2006). There is no aspiration here to resolve the issue. However, it is noted that performance can be measured in a number of ways and is generally accepted to be a product of national economy, industry, firm strategy, firm resources and capabilities and management competence in implementation, such that identifying any single variable as a determinant of performance is near impossible. This is to say, that the absence of conclusive empirical evidence supporting Porter's categorisation is not sufficient to throw doubt on its veracity, any more than lack of conclusive evidence the other way is grounds for greater confidence therein.

Nevertheless, performance implications are of paramount importance. The most probable source of evidence thereon would, given this conceptualisation of Porter's work, be within-industry studies, over sustained periods, using multiple measures of performance and some standardised and instrumented measure of conformity of strategic variables and Porter's idealised categories. The industry concerned being low concentration, high competition. Again, such research seems not to be typical of the studies of Porter's generics. (See, however, section 7 below).

#### 6.5 'Not elsewhere specified' category.

A good classification scheme has an extension that covers all relevant instantiations, i.e. it is 'exhaustive'. That is to say that it provides a set of categories that is adequate to cover all entities / phenomena in the domain in question. It is advisable that any scheme dealing with social science phenomena allows for the unusual or rare

instantiation by allowing for an additional category of 'other' or 'not elsewhere specified' as a catch all for these non-conforming outliers. Porter lays out a conceptualisation or framework that makes no such allowance. This is a weakness, for there are presumptions surrounding his framework that can be challenged:-

(a) It is built upon an assumption of profit-seeking objectives as paramount. Not an unwarranted presumption in the main. However, at the time Porter was writing American industry was facing intense competitive rivalry with Japanese exporters seeking US market share growth (and export earnings for a natural resource-starved Japan) to some extent at the expense of near-term profits. It was not unusual to find, in industries such as motor vehicles or consumer electronics, that the 'failing' American contenders were earning significantly higher margins and returns on capital employed (ROCE) than their more 'successful' Japanese counterparts who were focused on growing market share, but earning thinner margins and lower aggregate profits. Each was operating under a different set of strategic objectives.

(b) Another important set of strategic behaviours that fall outside Porter's framework are those that seek to lessen the degree of competition facing the firm. Cartels, alliances, joint ventures, mergers and the like are framework-breaking strategies that again rose to prominence in the decades that followed Porter's first book (1980). 'Competition avoidance' joins 'competitive advantage' as a goal of strategy. To some degree John Kay (a British economics-trained strategist) has explored and described such behaviour under the heading of 'rent-seeking' strategies (Kay, 1995).

Notwithstanding the illustration above of two potential strategic behaviours that lie outside Porter's scheme; even were they to be accommodated as additional categories, it remains advisable to provide for some 'NES' category as a catch-all for other non-conforming instantiations. It is, of course, possible that subsequent examination of the contents of this NES category will suggest new categories in their own right. This, it seems, is an inevitable consequence of the reflexive, malleable and transient nature of social phenomenon.

Note that the point above is separate from the case of those firms that fall within his framework, but choose not to emphasise one of the four strategies for achieving sustainable competitive advantage. Such firms would be categorised as being in a hybrid, middling position – a position Porter describes as being ‘stuck-in-the-middle’. However, others have described this as a perfectly tenable position of ‘best value’ or similar. Their approach detaches Porter’s generics from an economics-based causal underpinning to either a motivated kind classification scheme or a heuristic argument that only a strategy clearly prioritised to one or other of his categories will succeed. By separating Porter’s scheme from putative causation and consequences, those suggesting a five position scheme are offering a nomenclature. It may borrow from Porter’s diagram and labels, but is not commensurable with his conceptualisation ~ such schemes do not ‘build upon’ or ‘draw from’ Porter, but offer a substitute. Under the principle of elevation (Chapter 3) such motivated schemes are ersatz.

#### 6.6 Porter’s generics as a heuristic classification scheme.

If Porter’s work is seen as providing a heuristic with a normative intent then the prime focus in researching it would be its utility to strategic management in strategy analysis and formulation both as regards ease of use, or ‘purchase’, and in terms of the results of implementing strategies formulated thereon, or ‘purpose’. Ease of use is best explored in terms of familiarity and adoption ~ usually the product of enquiries from respondent strategists and tool penetration studies and also citation studies as found in the fashion and fads literature. In this regard Porter’s work undoubtedly registers well as a whole, albeit the fact that his promulgation of the generics was mostly contained in books where (a) citation data is less available and (b) a wide range of analytical tools are deployed and it is, thus, not possible to distinguish the reference as being to Porter’s generics or to any other prominent conceptualisations of his, such as the Five Forces or Value Chain. A key indicator of ease of use would be intersubjective agreement in categorisation, or inter-rater agreement in empirical studies. Such data was not encountered in this restricted survey. However, the literature, even when critical, does not dwell upon the unreliability, inapplicability, or difficulty and expense of application of Porter’s generics, even though, as remarked earlier, there is no standardised and broadly accepted instrumentation thereof. Furthermore, the frequent use of the conceptualisation in case study analysis and its persistence in general strategy textbooks

over the decades indicates a certain utility and endurance. Thus, it is not unreasonable to claim that Porter's generics appears to be a tool with purchase, at least as a way of thinking about strategy.

However, the more taxing question for researchers is 'purpose' ~ is it a prescription that can be used to good effect? Utility as regards the generics as a guide to strategic management for sustainably achieving above average performance is very difficult to determine by large scale industry studies, despite the extraordinary interest such evidence would arouse. To assess conformity to type would require some satisfactory instrumentation that measured the properties of the individual firm's strategy against some idealised prototype of the category. Such instrumentation appears elusive. Performance is the dependent variable and, as remarked earlier, is also difficult to measure satisfactorily. Where, however, there is some established measure of 'industry average' performance (say, margin on sales, ROCE) there is the possibility of using the same criteria in any study. Alternatively, case studies can be used to explore this matter, but, as with all ideographic research there are problems with generalisations based thereon. One additional suggestion is that of taking past cases and claims for successful (or unsuccessful) adoption of generic-conforming or non-conforming strategies (such as 'stuck-in-the-middle') and reviewing performance over an extended period.

So far, the nature of the scheme's heuristic value has not been empirically evaluated in terms of how and why it is useful in guiding strategy formulation and choice. This might involve questions of functional utility in decision-making as regards, for example;- provision of concepts and terminology that facilitate group discussion; the setting out of options for consideration; reference to Porter's normative admonitions; etc. It might also raise questions of the reliability of the set of categories in relation to performance and prediction. Taken as an empirical matter this is about regularities and probabilities, but taken as a matter of theory, it also raises questions about why, where, when and how such may arise i.e. causality. If, however, it is claimed that we understand and can articulate causality, then the heuristic has shifted to being more than a decision-aiding tool, to one that rests upon some motivation ~ it is a claimed motivated kind (as well as a heuristic tool) and, given the greater utility of such for inferential use, the hierarchical principle set out in Chapter 3 would apply.

### 6.7 Porter's generics as a motivated kind.

Thus, if, on the other hand, we construe Porter's generics to be a postulated motivated kind, the implications for research thereon are important and are different. First, it would be implicit that there are causal forces at work that give rise to the noted homologies of successful strategies. As explicated above, whilst Porter did not formulate and present his generic strategies in quite this manner, it is consistent with his background and pedagogic presentation. The putative salient homologating forces being the operation of competition between private enterprises as described in Sections 3 and 4.1.3 above. Examination of same would not differ to any great extent from that set out above for empirical investigation of the generics as a heuristic classification scheme as regards basic methodology. There is the same importance attached to empirical research within a single industry and/or consideration of the competitive nature of the industries concerned in any cross-industry research panel. There is the same need for some standardised research instrumentation of Porter's categories. And the same need for at least one additional category of non-conforming strategies. Likewise, the use of industry panel data to determine 'average performance' and greater use of longitudinal studies as suggested for investigation of a heuristic scheme. However, the investigation of a motivated kind can be more 'scientific', and differences in research design or emphasis are also important:-

(a) As it is a claim to there being general homologating forces in operation to cause the homogeneity being recognised in the categories, the conduct of replication studies confirming or disconfirming Porter's (implicit) claim is far more important. The suggestion above of standardisation of research instruments has added cogency in the context of facilitating such replication.

(b) It is the action of what is here termed 'basic economic reasoning' in a competitive market that is the postulated homologating and performance-determining causation. But a number of determining powers, mechanisms or structures are in concurrent play in any market place. Empirical outcomes will be the result of a myriad of interactions between the underlying structures and mechanisms. Accordingly, it is, now, more appropriate to investigate these as

mediating components of our understanding. Instead of a single measure of 'industry competition' this would need to be decomposed into individual elements (supply conditions, demand conditions, market structure, price and income elasticities, and the like).

(c ) Although there are higher thresholds for statistical significance associated with claims arising from empirical investigations in the natural sciences than are likely to be achievable in the social sciences, the claim that Porter's generics are a cross-cutting abstract institutional motivated kind is one which, in principle, might be amenable to a hypothetico-deductive study method, or, more likely, to the type of contrastive studies favoured by Lawson ( 1997, 2003). This is not to suggest that the claim is likely to be upheld or discounted as a consequence of a single well-formulated study. But, a number and variety of such academic studies should serve to increase understanding and greater confidence in our knowledge.

(d) Finally, any research design must take account of the reflexivity of open social systems. The causal mechanisms can themselves be manipulated by the agency of the strategists under scrutiny. Hence, the importance of supporting quantitative research with longitudinal case studies that engage both with the strategy formulation and implementation activities within companies.

It should be recognised that this is a suggestion for further academic study of Porter's generics as a business strategy classification on the grounds that the exercise, whatever the outcome, is worthwhile. If Porter's generics do not serve, what will ?

## 7 A CASE OF PORTER'S GENERICS IN CONTEMPORARY USE.

### 7.1 Introduction – Nandakumar et al, 2010.

However, there is a sense in which what is (generally) taken to serve as Porter's generic strategy classification scheme does not serve the advancement of strategic knowledge as a scientific enterprise that knows the status of its kinds. There appears to be no published study of Porter's generics that construes his work as offering an



intersubjective means of classifying business strategies as a motivated cross-cutting kind in the manner explicated here. It is clear that (a) no such study has been revealed in this (perforce limited) literature search and (b) that this search has included some metastudies and reviews that, adopting a critical approach, would reasonably be expected to have brought such novel interpretations to light (Huggins & Izushi, 2011). Since one cannot prove a negative, a positive example of the problem is explicated below.

Typical of contemporary academic research deploying Porter's generics as the strategy variable is Nandakumar et al, 2010 '*Business-level strategy and performance: the moderating effects of environment and structure.*' in Management Decision. This study was selected because it is recent and concerns a fairly heterogeneous group of firms in a fairly homogenous common engineering manufacturing setting with relatively low concentration and relatively strong competition. That is to say, a setting in which microeconomic theory might suggest that the forces of competition would be felt in such a way as to reinforce the purported general homologising tendencies that underpin Porter's generic strategies. (Section 6.4 above). The study also exemplifies the highly quantified orientation to much contemporary strategy research and its attendant limitations.

The study was designed to explore the ways in which the constructs of business strategy, as dichotomised between cost-leadership and differentiation, and external environment, as dichotomised between two components of dynamism and hostility, and organisational structure, as dichotomised between mechanistic or organic, affected organisational performance as measured by two subjectively assessed criteria, objective fulfilment and relative competitive performance, and by two objective accounting measures; return on assets (ROA) and return on sales (ROS). The overall conceptualisation is that strategy affects performance and this affect is moderated by external environment and organisational structure. The study data was drawn from questionnaires returned by the CEOs from 124 UK manufacturing organisations in certain SIC (2003) codes, representing electrical and mechanical engineering.

Albeit the focus here is on the use of Porter's generics, it should be commented that these study aims are highly ambitious and involve a set of constructs – environment,

structure and performance – which in themselves would prove as challenging to instrument and disentangle as the strategy construct. As remarked below, the fact that little sense can be made of the results over and above the relationships that a commonsense understanding might have predicted without the study is both disappointing and expected.

## 7.2 The strategy construct.

Albeit employing the labels provided by Porter, there is a disconnect between Nandakumar et al's 'generic strategies' and Porter's presentation thereof. The strategy construct is by now entirely reified; strategies are either cost-leadership or differentiation i.e. a single dimension of the basis of seeking competitive advantage is used and there is no consideration of the scope / focus dimension. Further, there is no NES, partially compliant, hybrid, or other option. But more significant is the complete absence of discussion of this (reduced) interpretation, or even an offered description of the two strategies beyond their labels. It is assumed the reader is familiar with the construct and it requires no further exploration. This is despite the fact that the academic literature is replete with contradictory claims as to the justification for and utility of Porter's conceptualisation. Furthermore, the categorisation is achieved by a self-completion questionnaire assigning on a Likert scale of 1-7 'the extent to which your company focuses on the following in comparison to your major competitors' followed by a set of questions such as:- 'Emphasis on production capacity utilisation' or 'Intensity of your advertising and marketing'. There are 12 such questions (6 each for cost-leadership and differentiation), but no explicit rationale is provided for the instrumentation in this particular manner, other than the circular logic of the fact that it was used in another study. It may be possible to critique each and every question, but here the comments are confined to:- (i) the observation that 'focus upon' is not the same as achievement ~ an intended strategy v realised strategy distinction; (ii) none of the questions refer to scope – say, volume of output or breadth of markets served cf competitors; (iii) no justification is offered for why these particular attributes are selected and why all 6/12 questions carry equal weight in categorisation; and (iv) the mean scores for cost-leadership (4.83, SD 1.0) and differentiation (4.59, SD 0.98) are very little different from the mid-point of a 1-7 scale (4.67). This giving rise to the

observation that (probably) many firms are what Porter would describe as stuck-in-the-middle.

In the light of the presentation given here, particularly section 3.3 above, the categorisation of the sample firms' strategies could equally, and less ambiguously, have been based upon just two key questions:-

'Are you trying to' (for intended strategy) or 'Do you (for realised strategy)  
'achieve lower average unit costs than your competitors ?'

And

'Are you trying to' (for intended strategy) or 'Do you (for realised strategy)  
'achieve a price premium for your products ?'

One might also mention the contrast between the absence of any explication regarding the meaning of the terms 'cost-leadership' or 'differentiation' (which comment could be extended, albeit with less force, to all the constructs here deployed), with that of certain statistical methods questions – 2 pages on common method variance, non-response bias and internal consistency. The 14 tables of results contrasts with the sparse explication of the phenomenon they seek to represent and the absence of justification for the quantification constructs employed in their manipulation. One cannot apply scientific method to poorly characterised phenomena. Definitional clarity of concepts must precede their representation in epistemology.

It should, finally, be remarked that the lack of a characterisation of what constitutes a cost-leadership or differentiation strategy in terms of intension and extension, amounts to a glossing of whatever construal the authors have of the nature of their strategy constructs – we are not able to answer the question of what type of typology they believe they are dealing with. That is to say that, some 30 years after first promulgation, the constructs appear to have been taken as a recognition of a real world dichotomy and deliberate choice. A very striking example of how such terms can be reified in (and by) our epistemic practices.

### 7.3 Performance constructs.

Of course, one possible interpretation of the generic strategies is that they do represent a real world dichotomous choice (to be taken alongside choice of scope, if we accept Porter's fuller version) and the sortal is economic performance ~ only those firms that succeed in conforming to the categories' imperatives survive (the PSC interpretation described in 6.2 above). This, makes performance the independent variable and strategy the dependent variable ~ a reversal of the common assumptions and one which posits performance as the determinant of strategy focus. It is in tune with a motivated kind construal and is an approach that can be theorised in a population ecology construct to explain the emergence of characteristic strategy types such as not seen in the literature to date.

That 'moderating effect of performance and environment on strategy formation' construal postulated above is emphatically not Nandakumar et al's approach. But it does lead in to the consideration of their performance measures. These are twofold. First, there is a pair of subjective measurement scales (Likert, 1-7) for 'Objective fulfilment' and 'Relative competitive performance'. The former asking 'the extent to which you have been successful in achieving each of the following objectives in the last five years' and giving six questions of the ilk 'Improvement in long-term performance' or 'Avoiding problem areas'. The latter asks the CEO to 'compare the performance of your organisation in the last five years with that of your main competitors' and gives nine items such as 'sales growth' and market share change'. In addition are two 'objective' measures from a commercial database ROA and ROS, available for 88 out of the 124 participating firms.

Nandakumar et al's reported results for performance indicate that, whilst the objective fulfilment results correlate strongly with strategy and the dynamism of the environment, no such significant correlation exists with their accounting measures. Further, their more detailed exploration of the mediation effects of environment and structure upon the strategy-performance relationship do show some significant results for the subjective assessments of the CEOs of their 'objective fulfilment' and their 'relative competitive performance' (but they would say that, wouldn't they ?), but none with regard to the accounting data. When, however, a three-way assessment of strategy,

structure and environment is carried out the results are more open to an interpretation that accords significance to structure + strategy yielding success in ROA and ROS terms.

#### 7.4 Their conclusions.

The overall aim of the study was, as described earlier, to examine the moderating effects of the external environment and organisational structure in the relationship between business-level strategy and organisational performance. Also, as remarked above, this a highly ambitious study objective. It results in a series of possible permutations of strategy, environment, structure and performance that become somewhat unmanageable and inexpressible.

The results are summarised as follows:-

*‘For improving a firm’s performance in comparison to its competitors both cost-leadership and differentiation are effective in environments with a high level of dynamism. In low-hostility environments a cost-leadership strategy and in high-hostility environments a differentiation strategy lead to better performance in comparison to competitors. A cost-leadership strategy is more favourable for improving financial performance in highly dynamic environments. However, in environments with low levels of dynamism a differentiation strategy is more helpful in improving financial performance..... The results indicated that a mechanistic structure was more helpful in improving the financial performance of organisations adopting both cost-leadership and differentiation strategies. This could be because of the effectiveness of a mechanistic structure in controlling the cost and improving coordination within organisations’.*  
(Nandakumar et al, 2010, p 929).

The problems in employing the results of such a study are manifest in the above:- (i) can they be interpreted in the sense of being extended to other situations ? (ii) are the constructs useful to anyone concerned with the charting of strategy in a real organisation ? (iii) do they contribute to greater understanding of generalities by other strategists ? and, above all, (iv) are they convincing ? It is hard to answer in the affirmative to any of these questions.

## 8 CONCLUDING REMARKS.

It is evident that there are problems with the employment of Porter's generics as regards its construal in the research articles reviewed when preparing this chapter. The approaches simply cannot be characterised in relation to the considerations of kinds and categorisation elucidated in this thesis for the reason that such considerations appear not to be articulated by Porter or those who employ (or critique) his generic strategies in research. The fact that many studies are directed to finding whether the stuck-in-the-middle position is viable has been mentioned earlier and it should be repeated here simply that such studies tend to contradict each other, but largely, in the opinion of this author, because of the difficulty of isolating strategy as a determinant of firm performance given the diversity of the constructs and influences involved and the diversity of firm resource endowments and market positioning. In fact, a kind construal of those categories that accommodate the exigencies of the competitive business environment reverses the direction of causality ~ those strategies that survive to be noticed and generalised are accommodated to the causal forces in play. Those strategies that fail to achieve accommodation are eliminated by the competitive characteristics of the economic environment.

But two other comments regarding these problems should be registered. On the one hand is the 'problem of non-problematisation' ~ the generics are simply accepted in the reified manner described in the above discussion of Nandakumar et al's work. It is a sort of unthinking essentialist position that might be attributed to a form of psychological essentialism employing Porter's authority, and the use by others of his generics, as a placeholder notion for the 'naturalness' of the categories. On the other hand, are the writings that challenge the validity of Porter's construct as representing a meaningful segmentation of strategies into generalised categories ~ a nominalist challenge to find, or not find, his generics in the data from an enquiry designed to trap cost-focusers, cost-leaders, differentiators or focused-differentiators in their instrumentation. Yet this prompts the observation that it is idle to investigate whether any postulated institutional category conception 'exists' or not. From philosophy, Amie Thomasson shows that an institutional kind concept is established by a constitutive consensus and at a fundamental level is epistemically privileged. If the label has currency within a linguistic community it exists ~ be it 'democracy', 'cost-leader' or

‘ghost’. Whilst at the pragmatic level, an exposure to cognitive psychology (e.g. Gelman, 2003) has the interesting side-effect of demonstrating how easily a conceptual category can be brought into existence ~ a ‘blinxy’ is a small blue furry triangle ~ and deployed in our research. It appears that the important question, ducked so far by the strategy research community, is how useful are Porter’s generics as inference machines?

## Chapter SIX

### MINTZBERG'S COMPREHENSIVE FRAMEWORK

*'In this paper, we seek to delineate in an orderly fashion the "families" of strategies widely represented in organizations in general. In other words we wish to develop a comprehensive typology, a single logical framework, of generic strategies. We wish to draw on all the lists, where appropriate, but only for possible candidates which we wish to incorporate into one comprehensive framework.'*

(Mintzberg, 1988, p 3).

#### 1 INTRODUCTION: THE MAN AND HIS WORKS.

Given its comprehensive scope and his outstanding reputation as a strategist and academic, it might have been expected that Henry Mintzberg's contribution of an all-embracing system for the classification of both business and corporate strategies, launched in 1988, would have proved a serious rival to those offered by Michael Porter and Miles & Snow. That the 67 page article '*Generic Strategies: toward a comprehensive framework*' (Advances in Strategic Management, 1988), instead, sank into near oblivion is an anomaly that this case study seeks to explore. First, the outline of Mintzberg's scheme is explicated (as briefly as possible, given its ambitious scope). Then its intrinsic problems and truth claims are explored, largely in epistemic terms, before looking at the possible exogenous and contingent causes of its surprisingly near complete neglect. It is to the latter aspects, rather than ontological concerns, that the reasons why the framework was not adopted by the management and organisational science community is attributed i.e. it is concluded that social and contextual factors were paramount in explaining a fairly comprehensive failure on Mintzberg's part.

##### 1.1 Henry Mintzberg, strategist and academic.

One of the grounds for expecting Mintzberg's systematic and broadly based generic strategies to establish a strong position within the field is the fact that he was in



1988 amongst the most well-known of his generation of organisational scientists, and one with a record of stimulating writings on strategy based upon first hand studies of top management and their decision-making processes. In fact, in 1988 he was president of the Strategic Management Association, as well as being twice winner of the HBR award for best article for the years 1975 (*'The manager's job: folklore and fact'*) and 1987 (*'Crafting strategy'*). His ground-breaking doctoral study of how senior managers actually went about their jobs was published as a book in 1973 ~ *'The Nature of Managerial Work'*, and he became Professor of Management at McGill University in 1978 at 39 years of age.

Mintzberg is something of an iconoclast and has always been prepared to challenge academic orthodoxy regarding strategy with his own field observations (*'The rise and fall of strategic planning'*, 2000) and to challenge the legitimacy and effectiveness of management education (*'Managers, not MBAs: a hard look at the soft practice of managing and management development'*, 2004.) Two other very well-known studies with James Waters, *'Tracking Strategy in an Entrepreneurial Firm'* (Academy of Management Journal, 1982) which provided an inside view of strategy formulation within a Canadian retail chain, Steinberg Inc., 1917-1975; and their 1985 paper *'Of Strategies, Deliberate and Emergent'* (Strategic Management Journal), both controversially challenged the prevailing 'design school' view of the strategy process. Mintzberg became synonymous with a view of the strategy process that emphasised chance, intuition, opportunism and creativity, and that came to be known as the 'emergent school'. In other words, Mintzberg was very much at the height of his considerable fame or notoriety when he launched his generic strategies. If reputation and academic credentials are part of the determining factors in, at least, the initial interest in the first promulgation of a strategy classification scheme, then Mintzberg's had a lot of positives going for it.

## 1.2 The Publication.

However, there was a significant countervailing negative in Mintzberg's choice of where this contribution was published. The publication in question, *'Advances in Strategic Management'*, is an annual book series of multi-authored academic articles

and, albeit well respected, appears to have a fairly restricted circulation compared to other leading strategy journals. It is not published on-line and the electronic versions of earlier volumes reach back only to 1996. Books are not normally included in the Social Sciences Citation Index, but, unusually, ASM's status as a hybrid book series composed of journal-type academic articles meant that it was accepted and indexed, but not until 1993. Thus, citations of Mintzberg's 1988 article are not available from the SSCI. References to the article can be found on Google Scholar, and one can review the citations given there as a rough guide to the prominence of the contribution to academia. To provide a base comparison, the citations to the books and journal papers listed in paragraph 1.1. above are also given:-

TABLE 6.1. CITATIONS OF SOME OF MINTZBERG'S BETTER-KNOWN WORKS.

The nature of managerial work (1973) (Book)	5,490
The rise and fall of strategic planning (2000) (Book)	3,483
Of strategies deliberate and emergent (1985) (SMJ)	2,081
The manager's job: folklore and fact (1975) (HBR)	1,473
Crafting strategy (1987) (HBR)	1,291
Managers, not MBAs (2004) (Book)	648
Tracking strategy in an entrepreneurial firm (1982) (AMJ)	543
Generic strategies: toward a comprehensive framework (1988) (ASM)	269

Source: Google Scholar, 21 July 2011.

### 1.3 The Reception.

A further notable feature, however, is that the literature search does not reveal the same explosion of interest and empirical work that followed the publication of generic strategy classification schemes by Miles and Snow or Michael Porter a decade or so earlier. (The same Google Scholar search gave 5,281 and 9,784/10,099 respectively as the citations of these two authors' books as sources {Porter having extensively described his generics in both 1980 and 1985}). More significantly, a quick, but complete, trawl of the 269 papers (title / abstract) citing the 1988 article as noted above revealed only a single paper that sought to replicate or validate Mintzberg's scheme. This, Kotha & Vadlamani, 1995, compared a limited component of Mintzberg's framework with Porter's generics. It is discussed briefly in section 5 below. There are papers that have sought to apply the framework, but these tend to reflect an

interest specifically in relation to his treatment of the subset of strategies labelled ‘differentiation’ and in particular to manufacturing strategies. No papers appeared to address and critique the whole framework as a strategy classification scheme *per se*. There is no equivalent of the Campbell-Hunt (2000) metastudy of Porter’s work, nor of the implementation of research instruments equivalent to the self-typing paragraph or multi-item questionnaires developed for the Miles and Snow typology.

All in all, therefore, it seems justified to describe Mintzberg’s entry as somewhat of a non-event. A scheme of classification which, albeit using familiar terminology, failed to be effectively promulgated to and adopted by the strategy (research) community. In Goodman’s terms the Mintzberg-specific proposed relational structuring of strategy terminology was not absorbed into the general lexicon of strategists ~ it did not become ‘entrenched’ as an intrinsic component of conceptualising or discussing strategy. The plan of this case study, therefore, is to, first, lay out a summary of the content of Mintzberg’s 1988 paper whilst describing some of the associated and inherent difficulties with this work as a strategy classification scheme. It then looks at whether it was the absence of practical serviceability or other more exogenous features that led to the near obscurity in which it languishes today.

## 2 THE CLASSIFICATION FRAMEWORK.

### 2.1 The overall scope and ambition.

Albeit that both the Miles and Snow and Porter business strategy classification schemes were introduced in (conventional) books, the total text therein devoted specifically to their descriptions is no greater than the 67 page article devoted expressly to the comprehensive framework (less in the case of Porter’s generics). Mintzberg clearly had ambitions to challenge the others by producing an all-embracing scheme that drew upon this earlier work, particularly that of Porter. But he also widened the scope to include many other contributions, especially the Boston Consulting Group’s ‘growth share matrix’; the Ansoff matrix; and A D Little’s list of 24 strategic options. The paper is laced with references to the work of other luminaries in the field of strategy and the framework is a synthesis of Mintzberg’s thinking and the contributions of others, particularly Porter. (Miles and Snow’s work is merely mentioned in passing).

Most importantly, Mintzberg, noting that Porter's generics relate only to business strategy, set out to cover the whole of strategy, including those elements conventionally described as corporate strategy i.e. organisation scope, business control and integration, acquisition and diversification strategies. The upshot being that potentially any commercial firm's strategy would be covered by his 'comprehensive framework'. This is a scope ambition that has the advantage of extensive coverage, but at a cost of complexity and iterative distinctions between what results as some 48 different generic strategies at base level, 16 at mid-level and 5 superordinate levels of 'the content of strategy'. In this Mintzberg's scheme might be seen as Aristotelian or Linnaean in underlying hierarchical structure. However, this is not foregrounded in his work. He does not set it out in the vertical branching ('Tree of Porphyry') structure conventionally associated with hierarchical classification schemes and, arguably, has not fully exploited the cognitive simplification that such a presentation might have offered his readers. This is somewhat surprising in the light of Mintzberg's preference and aptitude for diagrams. The representation of his overall scheme is given on the last two pages of his text and as a listing, and left-right indentation, plus a bullet point system to indicate what in the presentation in Appendix 3.1. is given as 4 levels.

However, the reader's difficulties are somewhat mitigated by the fact that Mintzberg has devised two recurring elements that hold the framework together. The first is the use of little pictograms to illustrate his strategies by means principally of circles, cylinders and arrows. There are some 40 or so of these mini-diagrams scattered throughout the text, in addition to 11 full Figures. And, whilst they are not brought together in a coherent overall diagram, and are perhaps less meaningful to the reader than to the author, they do help distinguish some of Mintzberg's conceptualisations of strategies. Secondly, Mintzberg employs the recurring example of a hypothetical canoe manufacturing company and its strategies in relation to differentiation and its relation to upstream and downstream industries and activities as a means of illustration of alternative (corporate) strategic moves that such a company might make. He also uses actual canoe companies in some exemplars. This also serves to make the somewhat dry material more accessible to the reader.

## 2.2 The Framework.

There is rather too much material here to enable one to detail all the 48 main strategies that Mintzberg incorporates into his comprehensive framework. Instead, the main headings and some illustrations are described. In so doing, note that the concept of a ‘framework’ explicit in his title and implicit in the descriptions provided by him is not one that Mintzberg has represented in the text. The nearest is a lateral ‘dendogram’ with individual categories provided in *Table 3 The Framework of Generic Strategies* in the final two pages of his text, with the branching framework reading left to right via indentation and bullet points. This has been represented in Appendix 3.1. which, drawing upon the lead provided by Mintzberg’s phrase ‘families of strategies’, employs the terminology of a Linnaean (biological) hierarchy of Family, Genus, Species and Variety to indicate four levels of hierarchy.

The scheme allows for five main ‘families’ of strategy; A-E. Here Mintzberg differs with those who separate corporate from business strategy. He presents his own sub-divisions by arguing that identification of the core business and if and how it is to be elaborated and extended are two aspects of the same activity, and that there is a need for a category of strategies *‘that seeks to reconceive the organisation’s business or portfolio of businesses (in effect, perceiving a corporate strategy in business strategy terms).’* (ibid, p3). The resultant list is explicated below.

2.2.1 A. Locating the Core Business. Here Mintzberg draws upon Galbraith’s 1983 version of an industry supply chain, but introduces his own interpretation where the picture of a single dominant supply chain is replaced by a network of inputs and outputs and the industry becomes a junction in that network – a ‘node’ in a matrix. The core business is, thus, seen as the centre of gravity in a matrix of overlapping industries comprising the overall chain or sequence involved in the satisfaction of some final demand. The ‘core’ is that production stage which is regarded as the firm’s core competence (using today’s terminology) or in Mintzberg’s terms *‘the stage at which it focuses its attention, in a sense where its collective mind lies.’* (ibid, p 6). This lends itself to the three possible strategies of stage of operations, i.e. concentration upon the upstream, downstream or midstream positions in the chain; as 1a) – 1c) in Appendix 3. Thus, Mintzberg is suggesting that a key strategy determinant

– maybe a ‘genus’ level - is that of positioning within the particular industry; the three ‘species’ being upstream (e.g. extractive and raw materials industries); or midstream (e.g. fabrication and assembly); or downstream (e.g. wholesale or retail distribution and service industries).

A second genus level strategy is simply labelled the ‘Strategies of Industry’ and here Mintzberg’s meaning is rather ambiguous since, on some readings, it is very close to the first genus strategies of stage of operations. Under such a reading it refers to the selection of ‘industry’ in its macro-sense (e.g. ‘motor manufacturing industry’) in which to position the preceding stage of operations choice. However, this is not the interpretation of his meaning that Mintzberg’s treatment mostly invites. His use of the word ‘industry’ is far more consistent with a micro-sense (e.g. carburettor manufacture). This is not inappropriate when the strategic sense of ‘the industry’ is conventionally a group of firms employing the same production means to satisfy the same customer need. He adds another layer of meaning(s) by referring to the complexity of this choice of industry. It could mean the markets served (demand being addressed); or the products or services being provided (the supply side); or how the need is being satisfied (a technological dimension); *‘the list seems endless, as do the criteria for definition’* (ibid, p 11); and the boundaries between industries are arbitrary and subject to constant change ~ *‘Perhaps the basic problem reflects the fact that the analysts are trying to fix what the strategists are trying to change: competitive advantage often comes from reconceiving the definition of an industry’* (ibid, p 12). Had Mintzberg simply referred to his (narrow) use of ‘industry’ as the choice of business ‘Mission’, as described by Ansoff (1965), and meaning the set of customers or markets and products or production technologies it decides to maintain in its core portfolio, this would have avoided ambiguity with the first (broad) interpretation. It would make the strategic choice here subsidiary and consequential upon the positioning choice, and would make more sense of his final sentence of section A Locating the Core Business, viz; *‘We therefore close with the conclusion that the first step in the identification of an organisation’s strategy can be conceived simply as to locate the core business on a two –dimensional matrix, the state of the operating process (as categorised earlier) and the basic product-market configuration.’* (ibid, p 12).

Whilst one might conclude that Mintzberg has found himself somewhat lost in the recognised difficulties of providing a definitive depiction of both ‘strategy’ and ‘industry’, (as described in Chapter 1 above), it should be noted that neither Porter, nor Miles and Snow, engaged with that problem to any significant extent. Notwithstanding the subtitle of his 1980 book ~ *‘Techniques for analysing industries and competitors’* ~ Porter seems to take for granted that the business and its strategy are simply defined in terms of the competitive arena:- *‘Let us adopt the working definition of an industry as the group of firms producing products that are close substitutes for each other.’* (Porter, 1980, p 5). Miles and Snow, although conducting research in four industries, do not dwell on how their industries are delineated, and take them as more or less extraneous to their typology of how environments are enacted and responses are formulated by the organisations themselves. That is to say the issue is not ‘problematised’ in their work as it is in Mintzberg’s.

2.2.2. B. Distinguishing the Core Business. Here the objective is to define the distinguishing characteristics that will enable the organisation to achieve competitive advantage in its chosen sphere i.e. the core. It is the choice of distinctive competitive posture or business strategy adopted within the selected business mission as defined under A earlier. It is the specific manner of how the business will strive for success in the future, assuming that future is to be grounded in the current definition of the core. Mintzberg identifies three mid-level, or genus-level, sub-divisions of how this might be approached;- functional strategies; differentiation strategies; and scope strategies. And each of these has a number of basic, or species-level, discrete strategies – 5 functional strategies; 6 differentiation strategies; and 4 scope strategies, two of the latter sharing 5 different varieties. There are, thus, some 18 basic level strategies for distinguishing the core business. Mintzberg provides no indication of whether these individual basic-level strategies are mutually exclusive or, as is most likely, are to be combined in the sense of taking one option from each genus-level list.

It is when we examine these individual basic-level strategies that the main problems emerge; problems of specification and distinction of the strategic ‘content’. This is most apparent as regards the ‘functional or business strategy areas’. Here Mintzberg observes *‘This second level of strategy can encompass a whole host of strategies in the various functional areas.’* (ibid, p12). He acknowledges the conception

of organisations under systems theory as being a flow model of inputs, transformation and outputs and he contrasts his own diagrammatic (Figure 3 Functional Strategy Areas, in System Terms) version of Porter's generic value chain (1985) with the original (Figure 4 Porter's "Generic Value Chain" {Porter, 1985: p 37}). Mintzberg's version consists of 5 sets of strategies as listed in Table 3.2. above, 'genus' column B.3., 'species' column a)-e) ~ sourcing; processing; designing; delivery; and supporting strategies. He also provides indicative labels for each 'variant' of the species, but makes no attempt to describe the variants. Thus Sourcing Strategies cover procurement, people and finance, etc. The upshot of all of this is that the end result is a seemingly purposeless tautology – It is 'generic' in the sense that all organisations have to have such a strategy, but it is content-less. He makes no attempt to describe or contrast, for example, the different procurement strategies (for stock, bulk, JIT,) or alternative approaches to recruitment (core / periphery) and retention of staff, (hire and fire, internal development) etc. He comments *'An initial effort by us to delineate generic strategies for each of these functional areas was abandoned as overwhelming: there would simply be too many possible strategies, a great number of them industry-specific.....Accordingly, rather than focusing on functional strategies, we shall describe ones of a broader nature at the business level, noting however that these not only drive functional strategies, but, as we shall see, are also driven by them.'* (ibid, p 14).

Thus, Mintzberg has set up a dimension of functional strategy which, ultimately, takes no effective part in his framework. This raises the question of how he would distinguish strategies from tactics, since an escape route from the *cul de sac* he seems to have encountered as regards functional strategies, is to say that overall organisational strategies give the parameters that shape functional tactics i.e. to situate them as at a more trivial level in the hierarchy or to simply state that they are contingent and bespoke to the organisation and its strategy. Thus, altering the treatment above to a statement that, albeit that common themes will be encountered across organisations and contexts, the listing of available generic functional tactics is not attempted here ~ the reader must look elsewhere, probably in the literature dealing with specific functions. So, having effectively abandoned functional strategies, we are left with the two (Porter) dimensions ~ that of 'scope', and that of 'basis', but here given as 'differentiation'. Mintzberg admits to taking his lead here from Porter's duothetic generics, but only as



regards 'scope' is he content with Porter's framing. He states *'In describing the strategies that distinguish the core business, we take our lead from Porter's "generic strategies". But in so doing, we once again take issue with some major aspects of his classification scheme, seeking to develop a tighter typology.'* (ibid, p 14).

There follows a section which sets out an argument for replacing Porter's cost leadership strategy with one of 'price differentiation' ~ pricing below the competition. He concludes that whilst Porter's scope dimension is appropriate for adoption in his own framework, he rejects Porter's 'basis' dimension of cost or differentiation, for one that simply refers to means of differentiation. There are a number of issues raised in this treatment of Porter's work.:-

(i) First, is the question of whether the resulting product is coherent as between the two authors in their use of language. It is clear that Porter does not use the term 'differentiation' (higher price premium obtained for offering something different and valued by customers) in the same sense as Mintzberg (offering is simply distinct from that of competitors in some way). It is inadvisable to combine two similar, but different, conceptualisations under the same term.

(ii) Secondly, Mintzberg appears (at times) to misunderstand Porter's start point as regards the nature of the goal of strategy. Porter's concern was with sustainable competitive advantage and obtaining above average profitability, whilst Mintzberg places emphasis upon outselling the competition. *'If, as Porter argues, the intention of a generic strategy is to seize competitive advantage, then cost leadership per se does not do this. Rather, its natural consequence does: to use cost leadership to underprice the competition and thereby attract buyers'* (ibid, p 14).

(iii) Yet, at other times, there is recognition that Porter had a distinctive and different conceptions from his own:- *'A "cost leadership" strategy could, of course, be pursued to increase margins while simply meeting the prices of competitors. That would justify the label Porter gives to it.'* (ibid, p 15). But he then disparages such a strategy as a negative compared to his version of 'price differentiation', which he couches in positive terms. Surely the strategy to achieve maximum profitability, might arguably be

matched by, but cannot be trumped by, one of seeking maximum sales, even where the two are clearly complementary. (This difference between those who see the object of competitive strategy as being to increase profits or to increase sales surfaces later in Bowman's work and the Strategy Clock – Appendix 4).

The section 'Strategies of Differentiation' details some 6 means of seeking competitive advantage focused upon:- price; image; support; quality; design; and 'undifferentiated products'. The accompanying text describes these strategies in simple terms, exemplified by frequent reference to examples such as IKEA, Smirnoff, Maytag, Toyota, Marks and Spencer, Burger King and the like. The following section notes that each of these strategies of differentiation will emphasise different functional areas (e.g. price differentiation would promote processing operations; image differentiation would place emphasis upon delivery strategies, etc). This section of 6 differentiation strategies and the associated functional emphasis for each is the nub of a potential typology of business strategies, but is less than 6 pages. As presented here, and treated as a stand alone business strategy typology, it compares unfavourably with either the Miles and Snow or Porter typologies in terms of definition and clarity (and, hence, plausibility).

The scope strategies, defining the extents of the markets in which the firm sells its products, are given by Mintzberg as broadly accepting Porter's identification of this as an independent dimension of business strategy. However, his presentation here (with additional reference to the authority of Wendell Smith; S G Smith et al; and Dickson & Ginter, plus discussion of Porter's 1980 and 1985 versions of focus strategies) is of 'scope' as being of four 'species', two of which are further sub-divided, giving seven 'varieties' of strategy in all. They are listed as; a) unsegmented; b) segmentation – either b.i.) comprehensive, or b.ii.) selective; c) niche; or d) customised – from d.i.) pure, or d.ii.) standardised, or d.iii) tailored. Each is briefly described and exemplified both with real world examples and by reference to the hypothetical canoe company.

It should be noted that the two characterised sets of strategies ~ differentiation and scope ~ are referred to by Mintzberg as the 'Two Basic Dimensions of Business Strategy'. The first dimension is differentiation and is represented in a diagram of a segmented circle. The second is scope and is represented as segments along the length of a cylinder. This suggests that Mintzberg was possibly contemplating a three

dimensional representation (that, possibly, proved unsatisfactory). Had he, however, presented these ideas as a simple matrix of the six differentiation strategies on the vertical and seven scope strategies on the horizontal, he would have ended with some 42 cells, each describing a specific potential strategy e.g. image differentiation on a comprehensively segmented scope, or price differentiation in unsegmented markets. Arguably, such a presentation as a stand alone (and more extensively characterised) comprehensive framework of business strategy, might have proved more accessible than the comprehensive strategy framework presented here.

However, these musings raise a second question to which the text provides no clear cut answers. This is the degree to which Mintzberg regarded the ‘dimensions’ as independent of one another; i.e. opening up the full 42 ‘degrees of freedom’ suggested above. He is clear that organisations can pursue ‘mixed strategies’ as regards scope, meaning that in some product markets it operates comprehensively (say the home market), but in others it is more selective (say export markets). But that still leaves all cells in the matrix theoretically available. On the other hand he comments *‘a strategy is characterised as much by what it excludes as by what it includes. No organisation can be all things to all people (though some try), just as no biological species can live off the environment in general. The all-encompassing strategy is no strategy at all. Thus, to facilitate survival, every real strategy deposits the organisation that pursues it into a particular segment of the overall environment – in ecological terms, into its own niche.’* (p30). How Mintzberg might have reconciled these two possible constructions of his work is unresolved by the text itself.

2.2.3. C. Elaborating the Core Business. This is the third of Mintzberg’s ‘families’ of strategy. The first is the identification of the core business; the second is the development of a posture from which to compete. This, the third, concerns decisions about how to extend the size and depth of the core business. Later families of strategic decisions concern ‘extension’ or branching out beyond the core; and ‘reconceiving’, the readjustment and re-conceptualising of the core. By using the phrase ‘elaborating the core business’ Mintzberg is implying some degree of strategic change, but also one that stays within the same broad definition of the core business. There are, however, no clear dividing lines drawn between ‘elaboration’, ‘extension’ and ‘reconceiving’ and the

distinctions being made are fuzzy ones. Leaving one with distinctions that prove difficult for a third party to articulate or apply with confidence.

If the business strategy components discussed in 2.2.2 above owe a debt to Porter, this, and the next section (D. Extending the Core Mission), is largely based upon the Ansoff (1965) four cell product/mission conceptual framework. The first three of Ansoff's quadrants ~ Penetration; Market Development; and Product Development are adopted here, at 'genus' level; with 3, 2 and 3 'species' respectively in each. In addition, Mintzberg has split out a new section 'Geographic Expansion' from Market Development and added it as a genus-species in its own right. Thus providing 9 strategy species in all. (Ansoff's fourth quadrant 'Diversification' is the core of Mintzberg's fourth family ~ Extending the Core Mission.). Mintzberg's treatment is reasonably brief, straightforward and perceptive, with the added virtue that he also considers the negative or reverse strategy as an alternative to growth – 'harvesting market share'; 'consolidation of markets'; and 'rationalising product lines' are three of his nine strategies here. There is little to be gained by a detailed exposition of Mintzberg's discussion of these strategies. Except it is worth noting that he refers to the problem of boundaries or sortals when discussing product development strategies, in particular product extension: *'There is no formula to tell where the product extension strategy ends and the industry diversification begins. We shall return to the issue later to make the point that pinning down an industry can be like pinning down the wind.'* (ibid, p37).

2.2.4. D. Extending the Core Mission. These are a family of strategies where the goal is to take the organisation beyond the core business and extend the mission. He identifies four genus level strategies; chain integration; diversification; combined integration-diversification; and withdrawal. There are respectively 3, 4, 3, 3 species-level strategies in each, giving 13 strategies in all. One of these strategies 'Acquisition' has six varieties, such as majority or minority ownership, franchising, long-term contracting. As with the section on elaborating the core, Mintzberg also considers the negative strategies of withdrawal; – shrinkage, liquidation and divestment.

As one might expect, this is a well informed and stimulating treatment and Mintzberg adds a lot of his own conceptualisation to the discussion of the general topic

of diversification; disagreeing here and there with other academics and offering his own structures and diagrams. But it would require a major exposition to sensibly discuss these points and that would represent a digression from the treatment here as focussed on Mintzberg's contribution as a strategy classification scheme. As regards the scheme itself, again, Mintzberg's treatment suffers from the problems of definition or boundary-setting within the framework and between his strategies. It can depend, he notes, '*on what goes on in the heads of the managers who make the decision. Diversification or integration, it sometimes turns out, exists fundamentally in the mind of the beholder.*' (ibid, p 46). Again, his treatment is an interesting mix of real world examples (Alcoa, Canadian Pacific Railroad, Philip Morris, Carborundum Company, etc), his canoe company and the real company case study of a well-known Canadian supermarket chain, Steinberg's, that had been the subject of his 1982 paper with Waters. Two further points of passing interest relate to the transient nature of how terminology and packaging of notions varies over time:- a) much of what Mintzberg sets out here as corporate strategy is today largely covered under the topic of 'internationalisation strategy', and, b) he uses the term 'impartition strategy' (attributed to Barreyre, 1984) to describe what is more familiar to us as 'outsourcing'.

2.2.5. E. Reconceiving the Business. '*After the core business has been identified, distinguished, elaborated and extended, there often follows the need not just to consolidate it but also to redefine it and to reconfigure it – in essence to reconceive it.*' (ibid, p 54). Under the family heading Mintzberg identifies three genus - species level strategy groupings;- Business Redefinition; Business Recombination; and Core Relocation strategies. The first two having no sub-divisions, but the third having five distinct strategies. (i.e. there are 7 reconceiving strategies in all).

It is clear that Mintzberg recognises the problems inherent in describing a strategy of 'reconceiving a business' in such a manner. He points out that a business can itself be defined in different ways, by function, market, products, etc and comments '*All of these, no matter how tangible, are ultimately concepts that exist only in the minds of actors and observers.*' (ibid, p 55) and, regarding his own delineation of three strategy headings (genus-level), that '*the distinctions among them, as we shall note, appear fuzzy at the margins.*' (ibid, p 55). The comments made above regarding the treatment of these concepts by Mintzberg vis a vis other academics apply equally here.

### 2.3 The Conclusion (or lack thereof).

The paper (which has no abstract) seems to end somewhat abruptly without a section headed ‘conclusion’ or similar. This means that the end of the final strategy description ~ the strategy of relocation around a core theme ~ is not marked by any sub-headings; merely a new paragraph which starts ‘*This brings us to the end of our discussion of generic strategies..*’ (p 61). The final three paragraphs (just 21 lines of text) achieving the following:- 1) reference to the concluding table which summarises all the generic strategies somewhat in the manner given here in Appendix 3.1., a second paragraph that comments upon the uneven nature of empirical investigations of the different strategies he has identified and the requirement for more research on the consequences of following the various options he describes. 3) A warning against using his framework as a ‘pat list’.

This ending is sufficiently at odds with the extensive and structured introductions and main sections for one to speculate that some factor other than the original ambitions of the paper intruded upon Mintzberg’s writing. Maybe he was restricted by time or word count; maybe he ran out of energy and enthusiasm for the endeavour; maybe he recognised some of the intrinsic difficulties inadequately resolved in this work. (It might, for example, be noted that there are increasing references to the definitional problems and fuzziness of his material as the text proceeds). This is explored next, in Section 3. However, one might also note that it is possible that Mintzberg recognised the possibility of this work not proving successful in commanding the attention and adoption of the framework within the strategy community – whether of practice or research. That possibility, ‘the extrinsic difficulties’, is explored in Section 4 below.

## 3 THE INTRINSIC DIFFICULTIES.

It will be argued that there are four principle intrinsic reasons why Mintzberg’s classification scheme contained within it the seeds of its own failure. One is the inherent difficulties of the task he was taking on ~ the classification problems, and there are many, as discussed in 3.2 below. Secondly, it is argued, in section 3.3 below, that his scheme

was a nomenclative one which, in a sense, was competing with prior schemes of a more motivated kind, and, thus, at a disadvantage. Third, the fact that the scheme implicitly addresses a ‘reader’ rather than a ‘user’, i.e. was not designed as a heuristic device, is described in section 3.4. But a fourth, intrinsic reason, is the conclusion that the whole endeavour was somehow antithetical to Mintzberg’s overall set of beliefs as regards strategy. It is that his heart just was not in it. Section 2, above, was rounded off with the tentative suggestion that Mintzberg had somehow lost conviction as the 1988 article progressed, this point is dealt with first in section 3.1 below.

### 3.1 Lack of Conviction

It is significant that Mintzberg himself failed to promote this offering of generic strategies in some of his other key works on strategy. Had he been convinced that his 1988 framework did a good job he would undoubtedly have pushed it further. His 1994 book *The Rise and Fall of Strategic Planning* references some 19 of his own works, but not the 1988 article. The perceived significance lies in the fact that the whole thrust of Mintzberg’s argument in the 1994 book is against the notion of formal analysis and planning that is detached from doing that he associates with the works of, in particular, Michael Porter, including his formulation of generic strategies. His argument is perhaps captured best in the quotation below, bearing in mind that the whole book is an extensive polemic against formal strategic planning:-

*‘Generic means well-defined, belonging to a class, which implies that the categories of change have already been worked out, perhaps by some other organisation that did the innovating.... This seems to be more compatible with formalised planning. In fact we suspect that the proliferation of “mainline”, or generic, strategies in American business in recent years (and of the concept of “generic strategies” itself in the literature, dating primarily from Porter, 1980) corresponds to the rise to popularity of formal procedures of planning.’*  
(Mintzberg, 1994, p 181).

This text must be seen also in the light of the whole corpus of Mintzberg’s work from the 1973 studies of practicing managers to the present day. If there is an overriding theme, it is of the contingency and creativity of the tasks demanded of top management and the stultifying effects of prescriptive solutions and pre-packaged conceptualisations. One, somehow, feels that the 1988 framework was an aberration in his broad corpus of

thinking on strategy and that as the inherent difficulties of his material bore in on him he lost any conviction that the endeavour to crystallise and define the full range of strategies available to any manager was worthwhile. Had the 'framework' been the work of another, it would have been quite plausible to envisage Mintzberg greeting it in terms of Procrustes' bedframe.

This point is also born home by his treatment of the 'positioning school' in the book he co-authored with Bruce Ahlstrand and Joseph Lampel, *Strategy Safari*, 1998. They described some 10 schools of thought about strategy; the first three of which came under a general heading of the 'prescriptive' approaches, and one of these three was the 'positioning school' in which they located Porter's overall works, including his generic strategies. Importantly, they distinguished this school from the other two prescriptive approaches, (the design and planning schools) which tended to see strategy as a blank sheet offering unconstrained choice. Whilst, by contrast, the positioning school argued that only a limited number of key generic strategies are desirable in any given industry and the task of the strategist was to analyse the external conditions for the appropriate strategy choice. In a footnote they remark:-

*'One of us recalls a conversation with one of the best-known early proponents of this school. He was incredulous at our "exaggerated" comment that there could be an infinite number of possible strategies. He could not appreciate the idea of strategy as invention, as playing Lego instead of putting together a jigsaw puzzle.'* (Mintzberg et al, 1998, p 84, footnote).

Indeed, much of their critique of the positioning school is about the restrictive nature of generic strategies, as the following extracts make clear:-

*'The design school promoted strategy as perspective and encouraged its creative design. By focussing on strategies as generic, the effect of the positioning school may have been exactly the opposite.'* (op cit p 116)

*'The same problem [that of myopic vision] seems to occur in the academic research, when it favours boxing strategies into particular categories rather than studying their nuanced differences.'* ( op cit p 117 [with addition])

*'The positioning school focuses its attention on strategies that are generic, on industries that are established, on groups that have formed, and on data that has hardened. Studying the established categories discourages the creation of new ones..... It is another interesting irony that the positioning school, so proactive*



*in tone, is in fact among the most deterministic of all the schools of thought on strategy formation. While proclaiming managerial choice, it delineates boxes into which organisations should fit if they are to survive.... All of these prescriptions are presented in the belief that there is a best generic strategy for a given set of conditions: ignore these at your peril.'* (op cit p 118)

*'Porter continues to see strategy as necessarily deductive and deliberate, as if strategic learning and emergent strategy do not exist.'* (op cit p119).

In the face of these comments, the comparative failure of Mintzberg to promote his own version of generic strategies is quite understandable. In fact, it would be reasonable to ask why he set out on the endeavour in the first place. But that would be too simple in the light of the fact that these quotes are from his later writings and, more significant perhaps, that when producing a general strategy textbook, Mintzberg et al 2003 (2<sup>nd</sup> edition), he did promote his 1988 version of generic strategies. The reading that he reproduces there is a 12 page truncation of the original material that stays pretty faithful to the original, and includes reproductions of Porter's diagram of his generic strategies and Ansoff's product / mission matrix. The only difference of note is in the treatment of diversification and acquisition.

Thus, it is not possible to say that Mintzberg completely suppressed his 1988 work in subsequent publications. However, it is clear that he did not foreground this work, only including it when compiling a general textbook on strategy. Again one can only speculate that it is possible that it would be seen (possibly by his co-authors) as a lacuna to produce such a textbook without covering the topic at all. It is reasonable to suppose that, faced with such a requirement, Mintzberg considered it preferable to include his own version (which subsumes Porter's version and the works of others such as Ansoff).

Finally, and perhaps, trivially, (but, perhaps, not), the 1988 article is rather poorly edited and contains obvious typing errors. Evidence, at least, of some lack of care somewhere in the system.

### 3.2 The difficulty of accomplishing the task of classifying strategy.

The elusiveness of the strategy concept itself and the inherent problems associated with its classification has been elucidated earlier. It is, therefore, not repeated here. Suffice it to say that Mintzberg was taking on a very taxing, but much needed task. This section looks in more detail at the affordances and limitations of Mintzberg's scheme as a proposed means of providing an intersubjective strategy classification framework for the conduct of discourse, research and pedagogy. Notwithstanding the nomenclative nature of Mintzberg's scheme, (see 3.3 below), there is nothing in that status which, *per se*, diminishes it as a projectable set of terms of valuable epistemic utility. We can carve social kinds at man-made joints, especially *faute de mieux*. What distinguishes nomenclative social kinds from motivated ones is the lack of accommodation (Boyd, 1999, 2010) between the categories and their relations postulated in the classification scheme to the relevant causal social structures and mechanisms. But we do not have a rival motivated kind that embraces all aspects of strategy and trumps Mintzberg's epistemic utility by its ontological plausibility. The scope of Mintzberg's ambition is certainly enough, without insisting that it be accompanied by an explication of socio-economic motivation(s) giving rise to the behavioural property clusters ostended to in his categories of strategic action and their interrelationships.

The first, and most important, positive for Mintzberg's scheme was that it attempted to draw together business and corporate strategy into a single comprehensive framework. Had he successfully pulled off the attempt, the framework would have established a central place in the field (even helping to define the field itself). Secondly, in so doing, he drew upon the works of others of solid repute in the field and employed many familiar concepts in his own conceptualisation. To some degree, therefore, it was an inspired and creative contribution that, nonetheless, stood upon familiar foundations, particularly Ansoff and Porter. Third, Mintzberg has a deep grounding in empirical research on strategic management, writes engagingly and uses illustrations to good effect. Few authorities on strategy could have been better-positioned to make such a contribution.

That the contribution has been largely passed over can here be ascribed to the fact that the intrinsic challenges of the task proved more daunting than the affordances.

There were a number of possible factors which singly, or in combination (the more probable), worked against widespread adoption. These are listed below :-

3.2.1 Was the framework too intricate to illustrate ? The scheme's ambitious scope was both an attractor and a detractor. The resultant framework is never presented as a blueprint of an 'overall supporting structure' for strategic decision-making. This, it would appear, is because the different aspects of corporate and business strategy did not lend themselves to a single integrated structure, more to a set of bolt-on mini-structures. The various bases of his 'families' of strategies are incommensurable and, hence, do not fit easily together. That Mintzberg, one of the most visual writers on strategy, was unable to offer an engaging illustration of the overall scheme, and, instead, produced a rather unimaginative overall listing of its parts, although capable of providing effective sub-unit illustrative diagrams, surely says something about the insuperability of the task. The reader is somewhat frustrated by the fact that the overall 'framework' lacks any pictorial clarification of Mintzberg's own mental structuring of his layered material. (It is analogous to the situation as if a set of instructions for self-assembly furniture came with a list of parts and some illustrations of sub-assemblies, but no overall picture of the finished product).

3.2.2. An unorthodox conceptualisation of strategy ? It is surprising to note that Mintzberg's discussion of functional strategies (B.3.a)-e) in Appendix 3.) proceeds without allusion to the fact that most strategists regard the purpose (or at least a purpose) of business and corporate strategy is to give an overarching sense of direction, priority and focus to the various functions. Strategy is not the sum of the parts, but the end to which the parts are directed. This is, of course, most noticeable with regard to functional strategies, but it is a recurrent observation in trying to grasp his framework that guidance is absent as to whether these strategies are mutually exclusive, or are mutually reinforcing, or come in compatible (and/or incompatible) permutations. Mintzberg does not tell us how these individual descriptive items relate to items elsewhere in the overall framework. If the strategic manager's task is to integrate the aims of parts of the organisation such that they complement each other, then Mintzberg is silent on this process (surprising, since his writings in general emphasise process over product).

It is possible to construe this problem as a manifestation of Mintzberg's unconventional conceptualisation of strategy itself. He sees it as a pattern of organisational behaviour, rather than planned action; and that pattern is best seen in retrospect (Mintzberg & Waters, 1985; Weick, 1995). This, to some extent reflects the earlier discussion (Section 3.1.) regarding Mintzberg's lack of conviction about generics. He is highly critical of formal strategic planning and the projective use of generics in setting a forward strategy, and, maybe, sees generics more as a retroactive descriptive glossary. If the start point for conceiving what constitutes a strategy is that it is a pattern of past and current organisational behaviour, there is always an available ostensive point of conceptual reference. Concern for forward choices means a need for clarity about the range and characteristics of the available, but abstract, options. Strategy terms provide clear (one hopes) intent in a fuzzy, guessed-at future. It requires generics that provide definitions of possible decisions and plans, not a lexicon of descriptions of past events. Hence the frustration of the proactive strategist at Mintzberg's lack of guidance; regarding the interrelationships between his strategies, as raised here, but also as to success criteria, definitions and sortals as raised below (Sections 3.2.3 – 5. below).

3.2.3. Ill-defined and dimensionless terms ? At a number of points Mintzberg fails to define his terms, or is employing one sense of a term, rather than another, without making his choice clear. This, for example, is true of his use of the word 'industry' at a key point in drawing out distinctions within the family of strategies he is partitioning at genus-level. But the same kind of difficulty appears at a number of points in the paper. The classification scheme, especially with regard to his last two 'families' of strategy – Extending the Core Business and Reconceiving the Business – is one where the terminology ~ such as 'diversification' and 'integration' and 'core' ~ is already notorious for different usages. This is a field in which many authors offer their own specific definitions and relational structures, but none can command universal usage. There was a clear opportunity to offer a structured and principled version of these terms within a generalised scheme for the strategy community, and in an authoritative, single source. Had Mintzberg risen to this challenge in this paper, his structures might have commanded more attention and use, not, maybe, as an overall generic scheme, where he faced entrenched rivals, but as, say, the strategies of extension or reconceptualising the firm, where the competition was weaker.

As part of the preamble to discussion of his families of strategy, Mintzberg distinguishes between the ‘content of strategies’ (by which he means their direction or fundamental approach) and the ‘generic characteristics of strategies’ (ibid, Table 1. p 4-5) The latter are the dimensions along which a particular strategy can be pursued and described or measured – amount, speed, riskiness, overtiness, comprehensiveness, etc. This list of characteristics, itself over a page long, is attributed to various places in the strategy literature. Mintzberg comments thereon; *‘We believe this only confuses an already confusing subject, and so have tried to be careful not to mix characteristics and content of strategies (although, as it will be clear, some of the content strategies are inextricably linked with particular characteristics).’* (ibid, p 6). This is a laudable intent, but carries some consequences for clarity of exposition of the distinctions he wishes us to draw. When puzzling over the appropriate ‘content’ label (i.e. selecting one of the 48 strategies) to apply to certain strategic actions it is precisely the quantitative / qualitative dimensions that are pertinent. For example when does ‘market development’ become ‘geographic expansion’ ? ‘Niche’ become ‘Tailored customising’ ? ‘Linked integration’ become ‘Core relocation – Upstream’ ? etc. The self-imposed absence of terms like ‘frequent’, ‘strong’, ‘extensive’ or ‘large’ means that Mintzberg’s palette of descriptive language regarding relative significance of an organisation’s action is not readily apparent to another party. Intersubjectivity of his lexicon is thereby compromised.

3.2.4. Underdefined sortals and boundaries ? A recurrent problem, akin to that with his use of terminology as discussed above, is with understanding the structural divisions that Mintzberg is seeking to impose upon the protean world of strategic behaviour. Whilst he generally succeeds in presenting an idealisation of his concepts, he is weaker in defining the limits to one strategy in contrast to another. The watershed between one strategy and another, adjacent one is unclear in his style of description and discussion. In effect, Mintzberg, increasingly as the paper progresses, acknowledges this problem as being unsolved in this work, parking it as a comment upon the fuzzy nature of his material. Yes, it is fuzzy, and it is not easy to get intersubjective agreement on any set of terms or glossary of strategy ~ but Mintzberg does not provide a minimal, clear personal definition as a starting point for subsequent challenge. We are left with a fuzzy focus upon fuzzy material.

3.2.5. Standing on the feet of giants ? Finally, it should be noted that one reason for rejecting Mintzberg's treatment of strategy classification, is the fact that he borrows from the works of others on a 'pick and mix' basis. This involves, for example, the rejection of key elements of Porter's generics and a partial de-construction of Ansoff's product / market matrix. The resultant hybrids of incommensurable concepts are not vigorous. In both cases the conceptual structures, and associated claims, as presented by the original authors, are coherent and have stood for some time as significant contributions. By reducing the intellectual constructions of Porter, Ansoff and others to their components, Mintzberg is reducing their capacity to support his own work.

### 3.3. A Nomenclature versus Motivated Kinds.

As previously described, Mintzberg, throughout his writings, is a descriptive empiricist and, if anything, 'antitheoretical' is sometimes a better characterisation of his approach in general than 'atheoretical'. The components of his generic scheme are based upon a fairly robust logic, the core descriptions are reasonably delineated and the exemplars or idealisations supportive. Despite the limitations indicated above, this is a projectable scheme, or, perhaps, the first step towards one, that embraces all aspects of (for profit) strategy. It has no rivals of note. However, Mintzberg adduces no reasons for the claimed homogeneity of the cluster of behavioural properties he is describing i.e. commonalities of underlying strategic intensions across a multitude of different organisations in different industries and different markets. In other words he is providing a nomenclature for common strategic behaviours, not a causal explanation thereof. He describes no causal structures or mechanisms equivalent to those provided for the more limited contexts of Miles and Snow's explicit 'adaptive cycle', nor Porter's implicit 'competitive forces'. His scheme of generics rest upon his considerable authority, his extensive knowledge of business practice and research and his prowess as a writer. It is as if Mintzberg is saying 'this is how it is ~ believe me I know.' It is a nomenclative system, or a folksonomy, that offers a glossary covering the entire domain, based upon the experience and expertise of an acknowledged authority. However, a nomenclative classification, as such, is at a disadvantage compared to the motivated kinds of Porter and Miles and Snow; as explicated below.

The fact that a motivated classification scheme, based upon plausible claims to underlying causal structures, is superior to a nomenclature as regards inferential use and explanation has been described in principle in Chapter 3. We are generally content to allow the expert ~ and Mintzberg is certainly an expert ~ to provide us with the names of things. I am happy to take my green-fingered neighbour's word for it that this fern is a '*Pellaea rotundifolia*'. Putnam (1975) refers to this as the 'linguistic division of labour'. Where, however, as is the case here, the scheme is challenging two alternative and motivated kind classification schemes, it is at a severe disadvantage. Categorisation schemes that are based upon some putative essences or causal mechanisms and structures (Danermark et al, 2002; Elder-Vass, 2010; Harré & Madden, 1975; Sayer, 2000) will always trump an unmotivated scheme, unless the latter has some overwhelming compensatory advantage. Such might be found for a 'first mover' proposed scheme, since established, or 'entrenched' (Goodman, 1983), schemes that provide practical uses are difficult to dislodge, even if we subsequently 'know better' thanks to modern science (Dupré, 2002). This is also supported by 'psychological essentialism'. This is the innate bias toward believing that there are reasons why homogeneity can be found in the natural and social world (Gellman, 2003; Keil, 1991; Medin & Atran, 1999). This assumption that our categories reflect causality, whether or not the cause is articulated or understood, means that successful nomenclative classification schemes can catch on within a knowledge community, or find common use by the general public, provided that the absence of known cause is unchallenged. Where, as in this case, the scheme is competing with already established motivated kind schemes, the challenge may be insuperable.

#### 3.4 A Nomenclature versus a Heuristic Device.

A nomenclature of a natural (physical) kind generally provides little by way of decision-making guidance or utility beyond that of type identification. Recognition of an oak tree or of lead ore has certain utility in human purposes, but we can do little to turn an oak into an elm or lead into gold. The entities being identified are more or less immutable. On the other hand, to some extent we can select participation in social kinds, particularly those of an institutional nature. The categories themselves offer a menu of possible choice and prior choice might be intentionally modified by human agency. (This often falls under the description of 'change management'). Thus, it is possible that

what is primarily a nomenclative classification has less potency in the social sciences than its potential in the natural sciences. Its accommodation to the expectations of the disciplinary matrix is weaker than a classification that contains normative connotations ~ in the case of strategy, the performance implications of such choice are likely to be highly salient.

A 'generic' strategy is, elsewhere, taken to mean an option which if properly understood and implemented will lead to organisational success, or at least avoidance of failure. Much of the interest in generic strategies is due to the fact that firms wish to improve their financial results and those that have promulgated such schemes tend to argue for 'equifinality' of results i.e. there is not one generic strategy that trumps all others. The Miles & Snow typology and Porter's generics, and other similar attempted schemes, generally argue that the successful implementation of any of their strategies, with the exception of the 'failure' route, ('Reactor' for Miles & Snow; 'stuck in the middle' for Porter), will lead to above average performance. In so doing, these generic strategies stimulate interest and engagement by practitioners and consultants (does my strategy match up to the requirements of the successful type ? will we improve profitability if we faithfully pursue one of the described strategies ?) and among academic researchers (do the strategies characteristic of the firms in my study match those as suggested ? does the performance data support the {equifinality} contention ?).

So the reception of a proposed business strategy classification scheme will reflect the instrumentalism of its users. However, none of this is apparent in Mintzberg's presentation of his framework (or, in the main, in the subsequent academic literature drawing upon this source – albeit, see Kotha & Vadlamani, 1995). In fact there is no overt discussion of success and failure in the 67 page paper; no claim that certain strategies are more suitable or successful than others; no admonition to adhere strictly to a single 'pure' version, nor invitation to hybridise at will. Hence there is little in Mintzberg's framework, other than the fact that he is exhaustive in listing potential strategies, to attract its use by those engaged with consideration of strategic choice ~ it provides a rather poor heuristic device. In fact the text seems to consider a 'reading' or 'reader', rather than direct consideration of some 'use' or 'user' of his framework. For example, the initial justification for the paper is not a need to improve strategic performance, but one of needing to sort out and reconcile a proliferation of conflicting



lists of strategies. A discursive concern rather than a performance issue. One might conclude that a strategic manager would have little incentive to read the paper if all it does is describe his or her options. This lack of normative content to Mintzberg's presentation of the strategy typology illustrates an aspect of his work in general – the privileging of description, often rich and insightful description, over prescription. (See Gosling 1994; Mintzberg, 1977). It being quite possible that Mintzberg would resist drawing generalised, normative conclusions from his work, leaving it to the reader to re-contextualise and apply the lessons, if any, from reports of his research.

### 3.5. Rounding-up the intrinsic problems.

It may be that this reading of Mintzberg is imposing a set of expectations upon the paper that were not part of his intentions. It is after all but one of Mintzberg's many, many papers in the field of management and organisation science. However, there is, in the paper itself, nothing to the effect that his ambitions were small-scale, tentative, or partial. Indeed, as the quotation from his text, at the Chapter's heading, makes clear, his intention was to provide a new, alternative and all-embracing set of generic strategies that covered the whole domain of strategy. He was aiming at a new glossary for intersubjective use by strategists. In this he failed to achieve the necessary entrenchment.

That the intrinsic weaknesses of Mintzberg's scheme outweigh its intrinsic strengths has been argued here. To summarise, the main weaknesses are:-

- A      Some equivocation in Mintzberg's own presentation and promulgation of his creation, and the fact that this is not the expected sort of product from that source.
- B      The ambitious scope and complexity of the framework, the absence of an overall representation of the framework, and the lack of precision in its presentation and delineation of the terminology / concepts involved, results in diminished accessibility and intelligibility to potential users.

C Mintzberg does not adduce any causal mechanisms that would generate the claimed underlying homogeneity of strategic action that he implicates in his segmentation of the field of organisational behaviour into generic strategies.

D The absence of claimed normative performance implications of direct interest to strategic decision-makers and researchers.

If Porter and Miles and Snow have over-simplified the complexity of business strategy options, Mintzberg's all-embracing alternative has not caught on. However, there are examples of, sometimes very complex, nomenclative classifications based upon intelligent and careful observation that have caught on (think of Linnaeus, Mendeleyev, or Luke Howard within their respective communities of practice). Mintzberg is right in observing the proliferation of partial lists of generic strategies and in detecting the potential utility of a single comprehensive framework. There is a potential constituency out there. Lack of easy intelligibility of their output has done certain philosophers no harm. Diffidence in promoting their output can be seen as confidence in its content. It does not seem, therefore, that the intrinsic weaknesses outlined above were sufficient to mean failure to thrive was inevitable. This brings us to consideration of the extrinsic factors that might have acted in conjunction with the above intrinsic factors to the detriment of acceptance and use.

#### 4 THE EXTRINSIC FACTORS.

Here the fact that Mintzberg's framework was in a sense in competition with other generic classification schemes is the paramount consideration – as described in 4.1. below. In addition there were a number of lesser, but not trivial considerations – the fact that Mintzberg is a Canadian (Section 4.2) and the relative obscurity of the source publication (Section 4.3) are also covered below. Finally, there is a general factor affecting all classification schemes in this field – the absence of an international and impartial validation authority, that might work more against an anti-establishment (and non-American) proposer. (Section 4.4).

##### 4.1 Pre-emption by other classification schemes ?

Earlier, it was argued that Mintzberg's scheme is primarily a nomenclative one and was, thus, less likely to appeal to our innate psychological essentialism than a prior motivated one. It was also described as somewhat limited as a heuristic device. This was a partial exploration of an intrinsic weakness. More significant extrinsic issues bear upon the question of Mintzberg's scheme versus Miles and Snow and / or Porter. These fall under two headings as explored below; – the inferential power of the schemes; and the question of timing.

4.1.1. Practical adequacy. First, is the fact that (as explained in Chapter 3) in terms of utility, for inferential classification purposes, a motivated kind will hold greater practical adequacy for inferential and explanatory uses. Given that, as explained in Chapters 4 and 5, both Miles and Snow's typology and Porter's generics qualify as possible motivated kinds, this might seem to be conclusive against the comprehensive framework. But it is not that simple. As explicated in Chapter 3, there is a hierarchy of classification schemes in which a principle of elevation applies. A nomenclature may be lower than a motivated kind system, but, given a sound nomenclative system, one has also a heuristic system, plus a sorting device. But, as reported above, Mintzberg's framework was somewhat limited as a performance heuristic too. So the question of scope is also relevant. The greater scope of Mintzberg's scheme makes it far superior to the other two schemes that focus upon business strategy alone. Put another way, Porter's generics have nothing to offer for denoting, sorting or connoting in the domain of corporate strategy. (That is in terms of a structured classification scheme ~ Porter has much to say about corporate strategy elsewhere in his work). Miles and Snow have no type of strategy that deals with different varieties of 'acquisition', do not discuss 'withdrawal via divestment', have little to say on 'integration', etc. Mintzberg's classification scheme enables one to identify and consider these as available strategic options. There are, of course, generic classifications in corporate strategy, particularly the Ansoff framework upon which Mintzberg draws. But this time the inadequacy of the Ansoff scheme as regards business strategy applies. For all the intrinsic flaws described above, there is compensatory reward in the width of Mintzberg's scheme. Remember too, that there are qualifications aplenty about the alternative more-limited schemes, whether motivated or not. Despite all the qualifications, there are insufficient grounds here alone for dismissing Mintzberg's comprehensive framework.

4.1.2. Timing. This, an entirely contingent factor, has a large impact upon the story. The fact that Miles and Snow (1978) and Porter (1980, 1985) pre-dated Mintzberg's work, and were already well known throughout the academy when he launched his own scheme, meant that his offering had to co-exist with or usurp these earlier, simpler and motivated schemes. Had Mintzberg published his scheme before the others this narrative would, in all probability, have been quite different. But there is no way to test the counterfactual conjectures.

But, remember that both the Miles and Snow typology and Porter's generics had, by 1988, an ambiguous status in academic circles. Various empirical studies and theoretical critiques had somewhat fractured any simple consensus about their adequacy (see Chapters 4 and 5). It was by no means inevitable that a 1988 proposed scheme of sufficient stature and functionality could not challenge, or even replace, these established schemes. What is asserted, however, is that Mintzberg's comprehensive classification of generic strategies was not such a scheme. It had insufficient intrinsic strength and extrinsic affordances to pull off the task of replacing the schemes upon which it drew.

Compared to the above, the next three putative extrinsic factors will only have possible contributory roles in the narrative of Mintzberg's relative failure.

#### 4.2. Canadians command less attention ?

Hard to prove, though no doubt believed by many to be true, is that the USA dominates the practice and research of strategy to the detriment of other English and (particularly) non-English language sources. It may be, therefore, that Mintzberg's status as a Canadian working at the Business School at McGill University in Toronto could be adduced as a reason for his work receiving less attention. This, however, is very hard to support in the light of Mintzberg's colossal status and renown in the field of strategy and organisation science. The truth is that he has comfortably transcended any disadvantages due to his national origins and domicile, and others of his publications are extremely well-known to strategists the world over.

#### 4.3 Recondite source ?

This is the simplistic ‘low road’ explanation of why Mintzberg’s scheme was largely overlooked. It is certainly true that the annual book / journal ‘*Advances in Strategic Management*’ is not as well known, is cited less often and is harder to obtain than many other strategy journals of that time. On the other hand, and in some mitigation, the textbook ‘Mintzberg and Quinn’ in its various guises is well known and the truncated version of the framework is replicated there for many students of the subject.

#### 4.4 Absence of impartial validating authority ?

There is no widely-acknowledged professional body or validating authority in the strategy field of practice. No *imprimatur*. No formal national, or international, body to appeal to, or to whom to submit a glossary for ‘adoption’; as might be the case with the functional professions in organisational science such as marketing, personnel or finance. There is no formal qualification in ‘strategy’ and, hence, no agreed set of definitions to learn or work to. (This is not to argue for such a professionalisation of the domain, merely to report a fact). There are the conventional academic circles, such as the leading journals and their editorial boards, and the USA Academy of Management is a strong network of international reach, particularly within the strategy field. The (USA-dominated) Strategic Management Association at the time of Mintzberg’s publication had little authority over practice, and it is to be doubted whether Mintzberg’s position as its president at the time carried much clout as regards the validation of his framework. The fact that cannot be ignored is that Mintzberg’s identification as an anti-establishment figure (i.e. a vocal critic of the dominant ‘positioning school’) was already becoming clear by 1988. He has done little to endear himself to the Business Schools since.

Whether or not this was a factor in the extrinsic reasons for the failure of Mintzberg’s framework to take hold cannot be determined. There are certainly lots of other factors that could claim priority in explanatory terms. However, the point being made here is that the absence of formal systems for authenticating terminology (as found in some scientific nomenclatures – see for example McOuat, 2009 on biological classification, or Hamblyn, 2001 for meteorology) left a more amorphous and subtle

system of tacit approval / disapproval in its stead. In such circumstances Mintzberg's ability to attract attention, by stimulating controversy with his peers, is likely to have worked against him. (The extent of antipathy to his works is most notable in Igor Ansoff's surprisingly sharp response to Mintzberg's 1990 paper on the 'design school' of strategy ~ Ansoff, 1991).

## 5 VALIDATION – KOTHA & VADLAMANI (1995) ~ A CRITIQUE

The limited literature search conducted via Google Scholar identified an academic paper that sought to validate (parts of) the Mintzberg scheme. This was that produced by Suresh Kotha and Bhatt Vadlamani, 1995 'Assessing generic strategies: an empirical investigation of two competing typologies in discrete manufacturing industries', *Strategic Management Journal*. Since this study compares only the six 'differentiation' core business strategies (i.e. Appendix 3.1., items B4 a)-f)) it is not a study of the Mintzberg framework as a whole ~ as such, this might be indicative of problems in instrumenting and investigating what is, after all, an attempt at a complete nomenclature of different strategies. It does, however, contain the observation that '*Beyond anecdotal evidence, there are no empirical studies that [seek to] validate Mintzberg's typology.*' (op cit p76, [with addition]). That is to say their study is a somewhat unique, serious academic study reported in a leading strategy journal.

The study comprised questionnaires, comprising 22 Likert-scale (5 point) questions, from 160 'discrete parts manufacturing firms' i.e. component suppliers in business-to-business markets in USA mechanical and electrical manufacturing. They reported '*Our, findings,... provide support for Mintzberg's typology and fail to support Porter's typology*'. There are, however, a number of issues (items a-d below) and two very pertinent questions of principle raised by this article and its conclusion:-

- a) It strips out one element of Mintzberg's classification scheme without any acknowledgement that it is nested in a broader framework. Even accepting that the business strategy component might be taken as a stand alone from the choice of mission ('locating the core business') and corporate strategy ('elaboration'; 'extension' and 'reconception') components of Mintzberg's total scheme, and, further, accepting that Mintzberg himself abstained from

characterising his ‘functional areas’ of business strategy; one is left with no consideration of Mintzberg’s characterisation of the ‘scope’ over which the ‘differentiation’ strategy is operationalised. Put another way, the strategies being examined here are one-dimensional and somewhat remote from being implemented / implementable without a (strategic) decision on the scope dimension.

b) The 22 ‘underlying dimensions of strategy’ are those previously identified and instrumented by Dess & Davis 1984 in relation to Porter’s generics. This study *‘provides empirical support for the presence of strategic groups based upon Porter’s (1980) generic strategies. Variations in intraindustry profitability and growth are found to be related to strategic group membership. Firms identified with at least one generic strategy outperformed firms identified as “stuck in the middle”’*. ( op cit, p 467 {abstract}). Thus, it seems odd to claim that Porter’s generics are not confirmed by their own study without some discussion of the contradictory findings of Dess & Davis using the same instrument.

c) They seem to share with Mintzberg what was described earlier (2.2.2. (ii) and (iii) above) as a misconception about Porter’s basis of competition on lower costs as being valueless as a competitive advantage unless converted into lower prices.

d) There is no measurement or consideration of the relative performance of firms that conform to different degrees to one or other of their six strategies. There is, thus, an internal focus upon research method ~ *‘Taken together, these results provide strong evidence of a good fit between the model representing Mintzberg’s six generic strategies and our sample data.’* (op cit p 79) ~ rather than on the fit between these strategies and the causal structures and mechanisms of the socio-economic environment. Surely it is the latter that provides the justification for their work on ‘competing typologies’.

## 5.1 Validation of what ? (and why ?)

At a deeper level, one is prompted to ask what conceptions of these labels Kotha and Vadlamani are attempting to ‘assess’ and ‘validate’ in the first place? They are assessing the generic strategies of Mintzberg and contrasting his classification scheme with that of Porter. But Porter identifies ‘differentiation’ at a level that encompasses five of Mintzberg’s labelled differentiation strategies (with the sixth, ‘price’, the subject of a conceptual contention). Let us take the generic ‘furniture’ ~ would one claim that a division into ‘bedroom furniture’, ‘dining room furniture’, ‘living room furniture’, etc is ‘better’ than the higher level term? It, surely, is a question of utility; fitness of purpose to our projects. Prompting the next question of why seek to ‘validate’ a classification scheme before establishing its utility? There are many potential ways of segmenting organisational behaviour, the primary question to be addressed is which of the promulgated schemes is best suited to which tasks for which users? (In particular, which scheme is better accommodated to the underlying causal mechanisms? Boyd, 2010). Had that been Kotha and Vadlamani’s purpose, the investigation would look very different from that which they report.

## 5.2 A circular argument is not a validation of anything outside the loop.

Furthermore, one is driven to enquire is not this research (and, *ceteris paribus*, that of Dess & Davis as regards Porter’s generics) fundamentally based upon a tautology? It seems to involve taking Mintzberg’s brief ‘gestalt’ descriptions of his six differentiation strategies, envisaging how these would be reflected in differences in priorities on 22 ‘dimensions’ (‘new product development’; ‘operating efficiency’ ‘build reputation’; etc); using a panel of six experts to judge which would be prioritised under each of the six descriptions. The dimensions are then put to executives responsible for strategy in their companies and they are asked to rate their priorities on the same set of dimensions. But the firms are then categorised according to the conformity between their selection of priorities and that of the composition provided by ‘experts’ – all one is doing is confirming that the two groups make broadly similar judgements as to the consistency of prioritising one cluster of variables over other potential clusters. Only a perverse choice of inconsistent priorities on the part of the experts or CEOs would disconfirm the findings. In effect this is the logical fallacy of begging the question dressed up in a positivistic presentation of structural equation modelling. (LISREL VI). It is an enclosed loop validating itself via circular reasoning.



There is no other substantive empirical investigation of Mintzberg's framework *per se* that came to light in the (perforce somewhat limited) literature search thereon. And, as indicated above, that which was examined proves less than convincing as regards suggesting any ontological foundations to the classification scheme. The accommodation to the investigatory, explanatory and inferential practices of the strategy community is partially attempted, and arguably achieved, in Kotha & Vadlamani 1995. But not accommodation to the causal structures of the world. However, this study fails to convince and reflects also the lack of putative motivation to kindhood, or homogeneity, in the original work. No study appears to have examined it as a useful nomenclative scheme, nor as an exhaustive (48 category) strategy heuristic. To investigate the latter, research would instead focus upon the usage by strategic managers in their discourse and enquire as to their inferential and predictive powers as assessed by this user community.

## 6 CONCLUSION.

6.1 It is highly challenging to come up with a classification system for business strategies and, maybe, we are too ready to discard that which is found lacking in some regard before we have a proven replacement able to withstand equivalent scrutiny. As Weick (1999) points out, it is unlikely we will ever achieve a framework that is simultaneously simple, accurate and generalisable. In so far as Mintzberg has provided an entry into this challenging task, it has to be judged that his scheme is certainly not simple. Nor, taking accuracy to reflect precision in aim, (whether ontic or epistemic) is it unambiguous as regards intension or extension. As regards the ability to generalise from Mintzberg's generic strategies, then its scope is wider than the others considered here, in that it includes both business and corporate strategy. Limitations as to generalisability has more to do with complexity and obscurity than with scope. It is clear that Mintzberg hoped to provide a conceptualisation and set of terminology that could have provided at least the basis of an acceptable nomenclative classification system. In this he is judged to have failed for a host of intrinsic and extrinsic reasons. These have been sketched out above.

6.2 However, the more significant overarching point here is that none of the discussion above related to failures based on ontological grounds, or truth values, in Mintzberg's work. The nearest this treatment has come to establishing pertinent ontological factors relates to the discussion of motivated kinds versus nomenclatures in section 3.3 above. More pertinent, by far, have seemed to be the epistemological questions of presentation, complexity, definition and the like, plus the relevance of social context within a community of practice. The practical adequacy of Mintzberg's contribution to the field, his proposed lexicon, is (it seems to me) at least sound enough to warrant further development and discussion. (But not of the sort undertaken by Kotha & Vadlamani). Beyond business strategy lies the greater conceptual complexity of corporate strategy, a challenge that has not, so far, come up with any structured terminology that commands widespread acceptance. Such issues, and their implications for strategy research extension and replication, are not currently resolved within the broad strategy academy.

6.3 No simple, widely accepted, and purportedly motivated kind, embracing business and corporate strategy classification currently exists. There is no reason to assume that our discipline, albeit dealing with abstract social institutional kinds, would not benefit from a truly intersubjective set of descriptive terms. Linnaeus' nomenclative scheme served the field of biology well long before Charles Darwin and Gregor Mendel made their theoretical contributions. Of the nomenclatures on offer, most are confined to the particular author or textbook glossary and none have the ambition and scope of Mintzberg's vision. Perhaps it is appropriate to review his 1988 scheme in the light of subsequent business activity and theoretical and empirical development, to see if his framework can be updated and reinforced, rather than overlooked.

## Chapter SEVEN

### THESIS, FINDINGS AND CONSEQUENCES.

*‘....some degree of essentialism is simply unavoidable. The disputes are usually over which essence we should accept as important, not whether essences can be dispensed with.’* McLennan, 1996, p 67. – Cited in Sayer, 2000, p 89.

#### PART A THE THESIS (BRIEFLY) OUTLINED.

Underpinning the thesis advanced here are a number of steps or propositions that are outlined briefly below:

- 1 The world contains many things and experiences that are alike; whether natural things such as rivers, rabbits and rainbows or social things like railways, retailers and revolutions. Some of these similarities are the outcome of the causal structures of the natural and social world. The capacity to recognise repetitions of encounters with the same or similar thing or experience is crucial to the mental capacity to form concepts and categories ~ a key fitness characteristic.
- 2 Categorisation is allocation to standardised or generalised representations. For humans, to employ words like rabbit or revolution which attach labels to these categorical phenomena provides the ability to intersubjectively share these as meanings, via language, and to act in concert under a description. This is a particularly human trait and advantage.
- 3 The association of repetitions with being the same type of thing or experience carries the implication that such things or experiences have some common central nature or characteristic property. They are alike in some meaningful way. Such entities are termed a ‘kind of...’. Furthermore, we humans display the capacity to distinguish between superficial similarities (labels beginning with the ‘r’ sound) and characteristics of greater significance in determining our kinds. Indeed it has been recognised that there is an innate bias when

acquiring language labels to assume that there is particular significance and justification in the selected determining characteristic(s): that the appropriate partitioning of phenomena is donated by the inner natures, or essences, of the phenomena themselves.

4 The notion that this partitioning and aggregating of the phenomena of the natural and social world into categories is done in some meaningful way, in this context, indicates that it provides us with utility in fulfilling our projects. It is the best way for dividing things up in order to accomplish our goals. There are, thus, those who interpret the selection of the partitioning criteria as being imposed upon the phenomena by ourselves. Our categories are simply nominal arrangements that suit our purposes.

5 A reconciliation of the two conceptualisations of categorisation is achieved when it is concluded that human purposes in classification are usually best served when the categories themselves reflect, or are accommodated to, the underlying intransitive nature of the world, and its causal structures and mechanisms, whether natural or social. The categories that most reflect the nature of the world are the most likely to be of value to us in our dealings with that world.

6 Of particular interest here are the kinds deployed within a particular branch of knowledge. The notion of a 'science' encompasses a communal lexicon of kind terms, i.e. predicables, without which generalisations are not possible. It also encompasses common methods of knowledge acquisition. A community of practice will have a specific set of kind terms and associated epistemic practices. Since all science (physical or social) seeks generalisations and reliable inference, a successful science must determine with care the kinds of phenomena within its domain. Good categories are necessary for good science.

7 All actions, all workings, all research, is under a description current within the community of practice under which it is undertaken, and that description is held in common among its members. Meanings are collectively held. Social scientists construct 'tools' for organising social facts into research objects, and (although seldom discussed in terms of kinds) classification schemes are one such tool.

8        A science which establishes clear identity of its kinds and their meanings (intensions) and their boundaries (extensions) makes greater progress in theorisation and explanation than one where intersubjectively stable terms are not established. Imprecision is detrimental to shared meanings and a progressive science.

9        Any established scientific lexicon of kind terms connects with other terms in an expanding network of knowledge that provides access to a set of mental inferences which embellish our thinking and enhance our decision-making and forecasting capacity. New terms, specifically categories in a proposed classification scheme, must achieve linkage between the internal conceptualisation of the proposer(s) and the interpretation thereof by the wider community. Terms achieving intersubjective currency within a disciplinary practice become 'dictionary entries' and each such entry connects to a host of 'encyclopaedic entries', in an endless network of cross-referenced interconnections becoming, thus, a rich source of inferential potential. An 'inference machine' that underpins our thinking and our projections.

10       There are different domains of reality which contain different types of kinds. The characteristic kinds associated with the social sphere and the collective human activity that is organisational behaviour are abstract institutional kinds.

11       Any and all classification systems are artefacts of human thought. The fact that abstract institutional kinds are irreducibly human and contingent, does not mean that it is impossible for such kinds to be intransitive objects of study.

12       However, the science of abstract institutional kinds is distinctively different from that of natural kinds. In particular, being grounded in social practices, they are transient and local and, thus, unlike the paradigmatic notion of universal and eternal scientific kinds. Furthermore, being abstract means that simple ostension to physical kind members is not possible. Reference must be to shared descriptions, typifications or exemplars providing intersubjective meanings. Finally, social kinds are reflexive ~ the entities being categorised potentially interacting with the categorisations (descriptions) available to them.

13 It follows that the treatment of abstract institutional kinds in our scientific practices will, perforce, be distinctively different from those practices associated with natural kinds.

14 Our particular research object is business strategy classification systems; these are a relational set of kind terms, or categories, which can be predicated of certain collective strategic intentionalities on the part of commercial organisations in competition with one another (and which, ideally, encompasses all such activities as defined below).

15 The intension of business strategy being defined as the collective sense of overriding purpose that provides the touchstone of prioritisation in the disposition of organisational resources and functional goals. It is a local, intersubjectively agreed means by which a business unit achieves coherence and coordination of future activities in seeking fulfilment of its overall objectives in the face of its interpretation of the salient market environment.

16 The intensions of individual business strategies must be delineated with care and contextualised as contingent to a particular spatio-temporal societal / economic / institutional setting. Each organisation is *sui generis* and 'strategy' is the product of the interplay of individual agents acting more or less in concert to a more or less common goal in the light of a more or less agreed interpretation of the salient business environment. The scope for heterogeneity in both attributes and outcomes is enormous.

17 Yet it is a matter of observation that, commonalities can be detected across strategic behaviours across a number of different business environments and, accordingly, certain general schemes of business strategy classification have been proposed and accepted as meaningful. These are at a high level of generalisation, conventionally termed 'cross-cutting kinds', in that they are found in different competitive industrial and market settings. As defined earlier, a business strategy classification scheme is a relational structure of different conceptual and generalised business strategy intensions arranged as categories, or types, asserted, or assumed, to be relevantly defined and arranged for intersubjective use, pertinent to the efficient sorting

and consideration of alternative choices of business strategy and the communication thereof.

18      Given the nature of business strategy as an abstract institutional kind shaped by the spatio-temporal setting of its social, economic, political and technological environment, and the heterogeneous nature of the personal and collective goals of its protagonists, there is little scope for enduring and precise definitions of particular business strategies as might be encountered in the physical sciences.

19      Instead of the enduring and precise necessary and sufficient conditions, or recognition criteria and sortals, established in certain paradigmatic natural kinds, the kinds of an organisational and management science will, perforce, be of the type called ‘fuzzy kinds’ or ‘family relation kinds’, with somewhat indistinct boundaries both as regards intension and extension. To complicate matters, as social kinds the entities being categorised interact with their categorisations: the objective of the researcher may be to categorise appropriately, the objective of the firm may be to avoid such categorisation, or to blur the distinctions.

20      The extension of a business strategy classification scheme can only be delimited as those organisations which can properly be said to directly possess a business strategy as outlined in chapter 2 above. (That others have extended application via analogy to contexts other than profit-seeking behaviour in competitive markets is more a recognition of the paucity of more suitable schemes than a reflection of the permeability of boundaries.)

21      The polyvalent and heterogeneous nature of business strategy is such that there is no ‘right’ way to segment it. Accordingly the field tolerates a plurality of alternative perspectives, according to the ostended behaviours registered therein or the cognitive purposes sought by such segmentation. If a scientific enquiry seeks to explore the nature and implications of ‘business strategy’ across the board i.e. as a universal, generalisable concept, only the broadest cross-cutting kinds are likely to be suitable for that purpose.

22      Insofar as it is seldom possible to assign all varieties of business strategies to one or other of a broad classification scheme’s prefigured categories, such schemes may

not be exhaustive. It is unnecessary to assume that such schemes must be exhaustive. Or it is necessary (or at least advisable) to add a ‘not elsewhere specified’ or ‘other’ category to aspiring exhaustive schemes.

23 Although the nature of ‘kinds’ is such that some motivation to the ostended similarity can be traced to underlying homologating forces causing the resemblance in question, this ~ the motivated kind ~ is not the sole type of business strategy classification scheme one may encounter. As stated earlier, all classification schemes are artefacts designed with some cognitive purpose in mind and this is not always scientific. A scheme may therefore equally be purely nomenclative ~ the attachment of a label to some reoccurring phenomena without imputing causality; or heuristic ~ an arrangement that sorts entities for decision-making; or even simply some sorting device ~ a means of grouping phenomena for ease of subsequent processing.

24 Notwithstanding the above, good scientific practice would privilege the motivated kind for research into the understanding of the causal factors giving rise to the ability to generalise and predict based upon categorisation. By and large, the inferential potential of such kinds is greater than that of others.

## PART B THE (GENERALISED) CASE STUDY FINDINGS.

Despite the difficulties of conceptualising and articulating categories in a scientific manner where the phenomena of interest is an abstract institutional kind, there have been a number of attempts to provide a generalised classification scheme for business strategies. Three of the more notable (and venerable) schemes have been examined in a series of detailed case studies ~ the Miles and Snow typology; Porter’s generic strategies; and Mintzberg’s attempt to provide a comprehensive framework. This section attempts to pull together some overall findings.

1 There is a general lacuna in the way that business strategy classifications are promulgated and projected in research practice ~ they are seldom explicit about the nature of classificatory claims being made and, when these are intimated, they are more likely to concern intension rather than extension. Many of the concerns articulated in this study are simply not overtly addressed in terms that propose or speculate upon



some connection(s) between the postulated categories and the causal structures of the world. Nor, when no such claims are made, is it clear exactly what utility is proposed in connection with the use(s) of promulgated schemes ~ what are they good for ? Nor do appropriate 'instructions for use' accompany the initial promulgation.

2        Nothing comes from nothing. All the case studies indicated that the original promulgators of such schemes had conceptual precursors that underpinned the proposed categorisations. In the case of the Miles and Snow typology this can be traced through various published papers. Porter's generics were situated in his understanding of the mechanisms and theoretical structures of profit maximisation in competitive markets, as made evident in his teaching rather than his main texts. Mintzberg's precursors were the conceptual structures provided by Ansoff, Porter and others. (As regards Appendix 4:- Bowman sought to encapsulate and frame the pricing / quality change options available to any competitive firm as a heuristic for strategic choice. And the Strategy Clock built upon conceptual foundations provided by Bowman and Porter.)

3        All three selected case studies were conceptual typologies or heuristic schemes and can be judged as producing projectable categories of differing degrees of utility. The potential of both the Miles and Snow typology and Porter's generics as putative motivated kinds was intimated in the respective chapters, but Mintzberg's comprehensive framework offered only a nomenclative system. All provided some potential utility as heuristics or sorting devices depending upon context of the user's interests.

4        Notwithstanding the projectability found above, none of the business classification schemes examined here have made explicit claims to exhaustivity (i.e. that all potential, current and future, members of the population had been assigned); yet none had explicitly designated a category functioning as 'not elsewhere specified'. (Albeit the Miles and Snow 'Reactor' category has been used by some researchers to act as a catch all for non-conforming types). Subsequent research employing such schemes tended instead to either retain just the designated categories, or to reduce them by suppressing one or more of the categories. This meant that such enquiries also tended to structure the enquiry instrument such as to 'force fit' the empirical instantiations to the classifications and to close the typology / heuristic to further additions or development.

5        The only truly empirical taxonomy examined in this thesis was that produced by DeSarbo and proved to have achieved accuracy at the expense of projectability. It was not a generalisable classification scheme, let alone some cross-cutting kind, but offered a mechanism for sorting a specific population into taxa (clusters) for subsequent analysis (albeit the value of such analysis would be compromised in the absence of some generalisability).

6        Given the instrumental importance of performance outcomes, it is unsurprising that claims to superior/inferior status or equifinality among categories tended to predominate in research follow-up to initial promulgation. However, such research does not focus upon understanding and explication of any putative causal mechanisms whereby conformity to category is associated with enhanced (or diminished) performance. Whilst the search for causal understanding is highly challenging, the absence of same diminishes the utility of strategy research practice and progressive knowledge accumulation.

7        The various case studies included some examination of certain follow-up studies of the business strategy classification schemes (albeit this thesis makes no claims to exhaustive study thereof). These revealed a general tendency on the part of the epistemic community that is organisational and management science to:-

(a)       Privilege instrumentation and empiricism in exploration of the classification schemes as nomenclatures over further conceptual development and search for putative causality of the non-accidental similarity being postulated, and / or for utility in the application of categorisation for generalised heuristic purposes.

(b)       Epistemic practices that freely adapt and re-contextualise the original schemes that, on occasion, pay scant regard to the origination of the scheme and privilege bespoke heuristic application over generalised causal understanding.

(c)       Privilege discussion of statistical confidence and significance measurement over exploration of conceptual meanings (intensions) and delineation of boundaries (extension) when employing the categories in research projects. When

reporting results this works to the detriment of their interpretation and utility. The much reported ‘relevance gap’ can be traced to the neglect of ontology and utility in such practices.

(d) Failure to convincingly either establish or refute the reality of the grounding in ontology of any of these schemes. Failure to directly and empirically seek out any underlying causal mechanisms and structures. And failure to establish the utility of the schemes in use by strategists.

Much of the capacity for progressive knowledge development in the field of strategy is, thus, squandered in misconceived research effort resulting from a faulty conceptualisation of the ontology of the research object itself. The task is hard enough without such nugatory projects.

## PART C CONSEQUENCES.

Without motivated kinds or entrenched nomenclatures there is little intersubjectivity of the collective abstract institutional phenomena that is business strategy. Without intersubjectivity generalisations are less soundly grounded for communication and application in our epistemic practices ~ there is no science. Without science business strategy (and organisational and management science) becomes closer to the arts and humanities. This is not intended as a derogatory observation, but a comment on epistemic practices; Dickens, Shakespeare, and the whole literary canon provides beautiful, illuminating and emancipatory works that immeasurably increase our capacity for understanding the human condition. Our strategy case studies can aspire to similar goals of illumination and understanding, but they are not ‘science’ as customarily understood, and our epistemic practices are currently ill-suited to our material. The attempt to reify and quantify such cross-cutting abstract institutional kinds that form the basis of business strategy classification schemes such that they are tractable to a version of probability- and correlation-based scientific method is delusional unless the ontological basis of any putative kindhood is established. If we wish to aspire to science, far greater attention must be paid to not just the similarities that we witness, but to the underlying causal mechanisms and structures that brought them about. To that end, certain findings from this work should be foregrounded.

1 It appears that the achievement of a truly intersubjectively established and causally understood kind of business strategy has eluded the science of organisation and management. Although both the Miles and Snow typology and Porter's generics are sufficiently 'entrenched' to offer potential in this regard, there are no substantive studies of the causal mechanisms that might lie behind their occurrences. Thus, there are no studies of the relationship between Miles and Snow's types and the detailed mechanics of the 'adaptive cycle' that (might) give rise thereto. Likewise there are no prominent studies of, say, the intensity of competition and the degree of conformity (or otherwise) of firms to Porter's generic alternatives and, should these be shown to be important determinants of conformity, how the homologating mechanisms themselves might work.

2 Classification is important to theory development and hypothesis testing and the science of strategy is all the weaker for a lack of established and characterised kinds enabling generalisations to be founded in the ontology of business behaviour of a strategic nature. The much reported lack of progress in our field and suspected irrelevance of our epistemic practices to the behaviour of those who practice strategy may be ascribed to lack of soundly delineated, understood and communicated concepts and categories. We lack the 'inference engines' that good kinds provide.

And, now, some more mechanistic observations:- Any promulgated classification scheme in the organisational and management disciplines should be clear as to:-

3 The claimed status of the scheme against the four types of classification described here ~ motivated kind; nomenclature; heuristic; or sorting device. Accepting that elements of each might potentially figure in the same scheme.

4 The intension of the abstract institutional kind being classified and the intensions of the individual categories therein must be described as clearly as possible.

5 The extension of the entities being categorised at both genus (the scheme) and species (its strategy categories) level, and the appropriate sortals must be made evident.

6 The design of any business strategy classification scheme should:-

- (a) come with appropriate 'instructions for use' (possibly, even, an originator's research instrument as public property)
- (b) allow for a 'not elsewhere specified' catch all category,
- (c) specify any hierarchical relations between categories,
- (d) recognise the contribution of good labels to entrenchment.

7 There is a possibility, only hinted at in this work, that other cross-cutting kinds of business strategy classification schemes might offer potential appeal and utility equivalent to that offered by Miles and Snow or Porter. For, let it not be forgotten, that these two currently dominate research that categorises business strategy. Such alternative motivational sources might be found in domains such as organisational sociology, the population ecology of organisations, rent-seeking behaviour repertoires, geo-political forces and 'varieties of capitalism', etc.

8 Above all, it should be acknowledged that, unless one subscribes to a view that perceived similarity of organisational strategies is only and always an accidental effect of our desires, any postulated and promulgated systematic classification may reflect the real results of an intransitive causality. Research to explore and expand our knowledge of how and why those causal mechanisms gives rise to the kinds is of importance. It must take at least equal precedence to the research that seeks to employ the classification scheme as a nomenclative artefact.

There is a common underlying theme to the manner in which the business strategy research community has adopted and explored these classification schemes. That is a desire to convert descriptions into instruments and then to explore the relations between the organisations so categorised and their performance vis a vis one another. The priority is to see whether there are meaningful differences between categories and, if there are, which category of strategic behaviour works best in which context. Whilst the putative causality, of why they might work best, seems to have been passed over.

Yet only that understanding can provide guidance to strategic managers. Only with the recognition that we don't, as yet, have well-founded and causally understood business strategy kinds, will our epistemic practices start to address the weaknesses therein.

## **APPENDIX ONE**

### **THE MILES AND SNOW TYPOLOGY.**

Additional exhibit materials derived from Miles & Snow's texts.

## Appendix 1.1.

## APPENDIX 1.1. DEFINITIONS OF THE FOUR TYPES AS PER VARIOUS VERSIONS 1974-8.

A 1974 – Miles, Snow & Pfeffer version

- 1 *Domain Defenders*, organisations whose top managers perceive little or no change and uncertainty in the environment and who have little inclination to make anything other than minor adjustments in organisational structure and processes.
- 2 *Reluctant Reactors*, organisations where top managers perceive some change and uncertainty in the environment but who are not likely to make any substantial organisational adjustments until forced to do so by environmental pressures.
- 3 *Anxious Analysers*, organisations where top managers perceive a good deal of change and uncertainty in the environment but who wait until competing organisations develop a viable response and then quickly adopt it.
- 4 *Enthusiastic Prospectors*, organisations whose top managers continually perceive (almost create) change and uncertainty in the environment and who regularly experiment with potential responses to new environmental trends.

B 1976 – C. Snow version.

- 1 *Domain Defenders*, organisations whose top managers perceive little or no change and uncertainty in the *organisation's narrowly-defined domain* and who have little inclination to make anything other than minor adjustments in organisational structure and processes.
- 2 *Reluctant Reactors*, organisations whose top managers....as 1974 version above.
- 3 *Anxious Analysers*, organisations whose top managers.....as 1974 version above.
- 4 *Enthusiastic Prospectors*, organisations whose top managers continually perceive, and may even create, change and uncertainty .....as 1974 version above.

C 1978 – Miles & Snow version ( *The typology* )

- 1 *Defenders* are organisations which have narrow product-market domains. Top managers of this type of organisation are highly expert in their organisation's limited area of operation but do not tend to search outside of their domains for new opportunities. As a result of this narrow focus, these organisations seldom need to make



major adjustments in their technology, structure or methods of operation. Instead, they devote primary attention to improving the efficiency of their existing operations.

2        *Prospectors* are organisations which almost continually search for market opportunities, and they regularly experiment with potential responses to emerging environmental trends. Thus, these organisations often are the creators of change and uncertainty to which their competitors must respond. However, because of their strong concern for product and market innovation, these organisations usually are not completely efficient.

3        *Analysers* are organisations which operate in two types of product-market domains, one relatively stable, the other changing. In their stable areas, these organisations operate routinely and efficiently through use of formalised structures and processes. In their more turbulent areas, top managers watch their competitors closely for new ideas, and then rapidly adopt those which appear the most promising.

4        *Reactors* are organisations in which top managers frequently perceive change and uncertainty occurring in their organisational environments but are unable to respond effectively. Because this type of organisation lacks a consistent strategy-structure relationship it seldom makes adjustment of any sort until forced to do so by environmental pressures.









## **APPENDIX TWO**

### **PORTER'S GENERIC STRATEGIES**

Additional exhibit materials derived from Michael Porter's works.

FIGURE 2.1 A REPRESENTATION OF PORTER'S GENERIC STRATEGIES

		COMPETITIVE ADVANTAGE	
		Lower cost	Differentiation
COMPETITIVE SCOPE	Broad Target	<b>1. Cost Leadership</b>	<b>2. Differentiation</b>
	Narrow Target	<b>3 A. Cost Focus</b>	<b>3 B. Differentiation Focus</b>

Source: Drawn from Porter 1985

## **APPENDIX THREE**

### **MINTZBERG'S COMPREHENSIVE FRAMEWORK**

Additional exhibit materials derived from Henry Mintzberg's works.



TABLE 3.1.

## THE COMPREHENSIVE FRAMEWORK OF GENERIC STRATEGIES

'Family'	'Genus'	'Species'	'Variety'
A Locating the Core Business	1 Stage Strategies:-	a) Upstream strategies b) Midstream strategies c) Downstream strategies	
	2 Industry Strategies.		
B Distinguishing the Core Business	3 Functional, or business strategy areas.	a) Sourcing strategies b) Processing strategies c) Delivery strategies d) Design strategies e) Supporting strategies	
	4 Differentiation	a) On price b) On image c) On support d) On quality e) On design f) Undifferentiated	
	5 Scope	a) Unsegmented b) Segmented c) Niche d) Customising	i) Comprehensive ii) Selective  i) Pure ii) Standardised iii) Tailored
C Elaborating the Core Business	6 Penetration	a) Expansion b) Takeover c) Harvesting	
	7 Market Devpt	a) Elaboration b) Consolidation	
	8 Geographic Expansion		
	9 Product Devpt	a) Product extension b) Line proliferation c) Line rationalisation	

TABLE 3.1. (Cont)

## THE COMPREHENSIVE FRAMEWORK OF GENERIC STRATEGIES.

'Family'	'Genus'	'Species'	'Variety'
D. Extending the core business	10 Chain Integration	a) Upstream / downstream integration b) Tapered integration c) Impartition	
	11 Diversification	a) Related b) Unrelated c) Internal development d) Acquisition	i) Majority owned ii) Minority own'd iii) JV / turnkey iv) Franchising v) Licensing vi) Long-term contracting
	12 Combined Integration - Diversification	a) By-product b) Linked c) Crystalline	
	13 Withdrawal	a) Shrinkage b) Liquidation c) Divestment	
E. Reconceiving the business	14 Redefinition		
	15 Recombination		i) Conceptual / tangible. ii) Bundling / unbundling
	16 Core relocation	a) Upstream / downstream b) Functional focus c) New business d) Core theme e) No focus.	

Source: Adapted (minimally) from Mintzberg 1988 p 62-63.

## Appendix 4.

**BOWMAN AND THE STRATEGY CLOCK**

NOTE: This appendix contains a case study of a heuristic for business, or more properly, marketing, strategy choice and its subsequent presentation in a general strategy textbook. There is little of direct interest here concerning the metaphysics of the classification scheme. It is, however, illustrative of a conventional construal of business strategy categorisation.

**PART ONE - BOWMAN****1 INTRODUCTION**

Cliff Bowman's 'customer matrix' is a fairly recondite conceptualisation, known to relatively few in the UK, and to even fewer outside these shores. It is, however, familiar to many in the UK through its adoption, in the 'strategy clock' as presented in Europe's best selling general strategy textbook, *Exploring Corporate Strategy* (Johnson et al, 1993 -2011.) The strategy clock is a composite; it combines elements of Porter's generic strategies with a presentation and structure drawing very largely on that suggested by Bowman. In fact the customer matrix is a handy business (or marketing) strategy heuristic that is worthy of examination in its own right. So, the first part of case study looks at the origins and nature of Bowman's contribution to strategy classification. It is also, of course, a necessary preamble to the discussion in the second part of the strategy clock as presented in *Exploring Corporate Strategy*.

The customer matrix was developed by Cliff Bowman whilst at Cranfield School of Management. As joint author of an early British general strategy textbook *'Strategic Management'* (Bowman & Asch 1987) he was well versed in the canon of strategy, including the works of Michael Porter and the Miles and Snow typology. The latter is presented as 'a typology of organisations' in a very short, but relatively faithful, summary of both the adaptive cycle and the four types (ibid, p 302-5). The treatment of Porter's generics, however, is somewhat perfunctory. The cost leadership and differentiation strategies are very briefly mentioned in that 1987 text (p 110-113 & 270-275), but as components of other frameworks. Bowman's own classification scheme for generic strategies is not included in the 1987 text. Its origins are found later and elsewhere:- The first is a working paper (Bowman, 1991) and then in contributions to a textbook that incorporated this thinking: - *'The Challenge of Strategic Management'* by Faulkner & Johnson 1992 - Chapters 4 'Interpreting Competitive Strategy', and 5 'Charting Competitive Strategy'. Subsequent papers and textbooks have re-represented and developed the concepts; particularly in the books *'The Essence of Competitive Strategy'*, 1995 which Bowman jointly authored with David Faulkner, and their 1997 collaboration 'Competitive and Corporate Strategy' and in Bowman's contribution to the *'Oxford Handbook of Strategy'* (2003), Chapter 14 'Formulating Strategy'.

## 2 BOWMAN'S "CHARTS".

The 1991 version of Bowman's framework is contained in a Cranfield University working paper titled 'Charting Competitive Strategy' and posits the answers to the question 'How can firm A improve market share?' as a series of options on 'The Competitive Strategy Chart' with relatively little by way of explication. The seven options, five of which are charted, plus 'cost efficiency' and (by implication) 'stay put' are carried into the two chapters that Bowman contributed to the Faulkner & Johnson 1992 book, *The Challenge of Strategic Management*. There the framework is introduced via a chapter describing Porter's generics and his own investigations of managements' perceptions thereof. He attributes his framework to developments arising from this coming together of theory and practice. Thus, he starts Chapter 4, 'Interpreting Competitive Strategy' in Faulkner & Johnson 1992 with:-

'This chapter explores Porter's generic strategies using the perceptions practicing managers have of their firm's strategic priorities. The following chapter builds on the empirical findings presented here, and develops a conceptual framework for exploring issues and options in competitive strategy. This framework emerges from the insights into competitive strategy derived from managers perceptions.' (op cit p 64.)

The discussion in this chapter covers, first, a very brief statement about Porter's generics, without explication of the underlying concepts, and the treatment of his work (largely) by other academics and points (not too surprisingly) to variations and inconsistencies therein. In all, a somewhat negative review. The second part describes a study undertaken with 1,716 (presumably British) top or second tier managers from 168 different SBUs over the period 1989-1991. The SBUs covered manufacturing and services and ranged in size from small partnerships to multinationals. Most importantly, the study investigated just two of Porter's generic types - cost leadership or differentiation. The outcome of the resulting factor analysis study using 16 questions and a 5 point Likert scale (modelled on the methodology adopted by Dess & Davis, 1984) was a set of 'four strategic thrusts' (op cit p 77) as follows:-

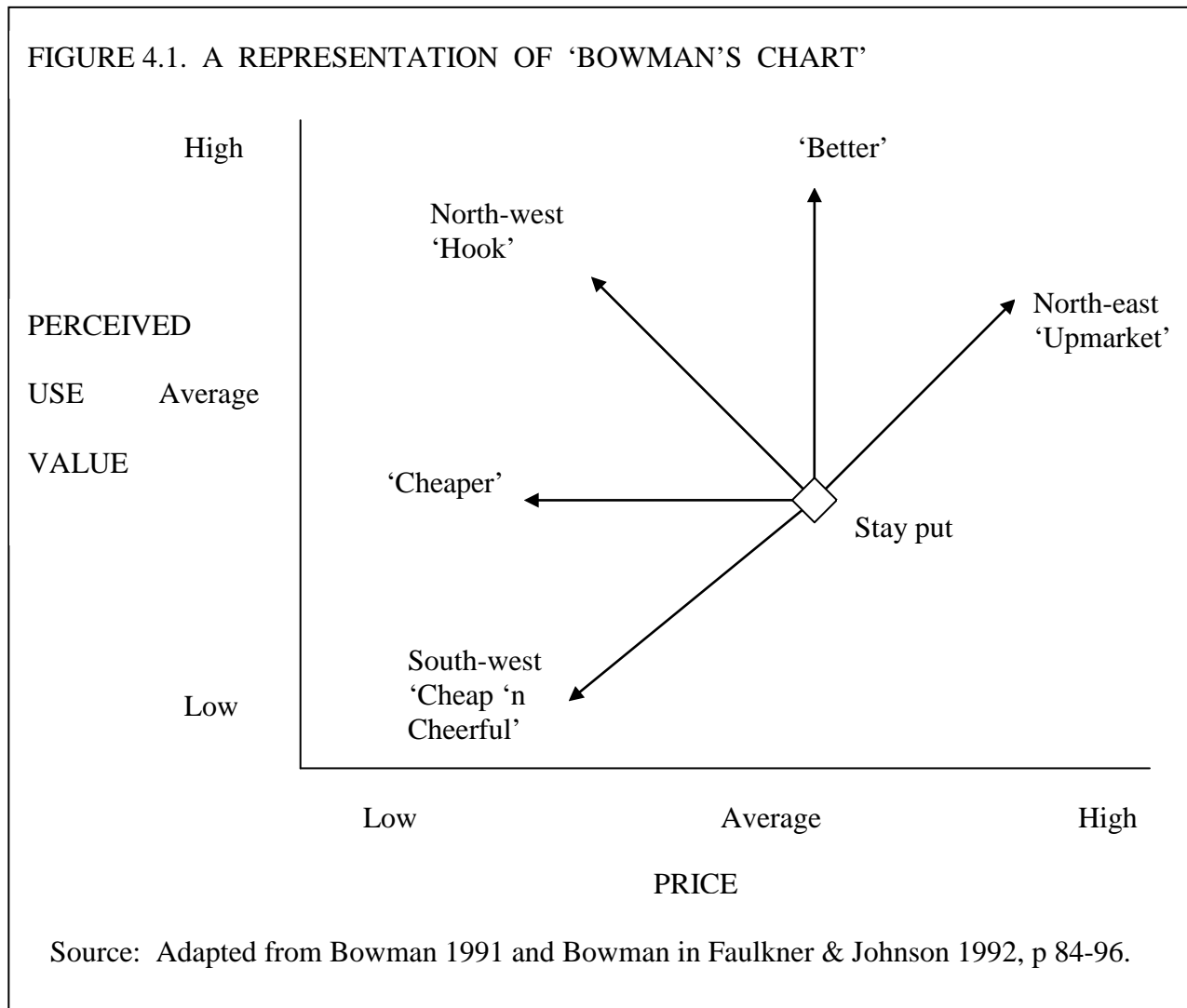
- Competing on price
- Offering unique products/services
- Cost control
- Product/service development.

Since some mileage is claimed for this empirical base, it is worth pointing out that; a) the four groups were determined by statistical criteria which explain only about half of the variation in the data; and b) it is remarkably difficult to discern, from the descriptions provided, the distinctions in organisational behaviour between the first and third and between the second and fourth groups which could, therefore, be regarded as perceptually nuanced variants of Porter's cost leadership and differentiation; perhaps different 'conduct' arising from different 'structure' in the various managers' differing envisioning of their competitive environments.

Alongside this empirical engagement, Bowman's own conceptualisation of types of strategic direction, or 'thrust', is given in Chapter 5 of Faulkner & Johnson (1992) 'Charting Competitive Strategy'. The presentation there is as was provided in his 1991

working paper, with much greater richness in exposition. Albeit the whole chapter is only 13 pages, including 9 charts. He writes:-

‘In this chapter the results of the empirical study of managers’ perceptions of competitive strategy is used as the basis for the development of a conceptual framework for discussing and exploring issues in competitive strategy.’ (op cit p 84)



Each of these charts has a vertical axis labelled ‘Perceived use-value’ (PUV), which is explained as ‘what buyers perceive as valuable, not what management think is valuable. Perceived use value refers to the feelings of satisfaction experienced by the buyer in purchasing and using the product /service.’ (op cit p 84). This definition seems indistinguishable from what economists would call ‘customer satisfaction’ or ‘utility’; or what a market researcher would explore via attribute analysis. The horizontal axis is ‘relative perceived price’, simply labelled ‘price’. To explain his concept of strategic thrust, Bowman takes a firm, nested in a cluster of similarly placed firms in the middle (average PUV, average price) of this chart and considers the consequences of moving in various directions, such as ‘left’ which means same PUV, lower price. He then

considers two aspects of this pricing strategy: the likely competitor response (to lower prices) and the requirements upon the firm to carry off this strategy successfully (cost leadership). Given below, as Figure 4.1, is a representation of Bowman's charts that combines the presentations in his 1991 working paper and that given as directional arrows against a background cluster of competitors in the 1992 versions of the charts.

The strategies are variously described by Bowman and set out as follows:-

- i) 'cheaper' i.e. left or west;
- ii) 'better' i.e. move north, (higher PUV for same price) which contains three forms - 'innovator'; 'first imitator' and 'protector' and three means of attaining higher PUV - better on all dimensions that users value; better on only some; and worse on some, but excellent on others;
- iii) 'stay put'; No change to price or PUV strategies.
- iv) 'cost efficiency' - no position suggested since this is a general underpinning to success for any strategy, but also can become an end in itself, an option some firms select as strategy and particularly those inward looking firms that stay put. (Suggestive of a third dimension of cost orientation, where the firm moves "downward" into a lower cost base ?)
- v) 'upmarket' or 'north-east' i.e. higher PUV, higher price
- vi) 'escape the pack' or 'north-west hook' i.e. increase PUV and reduce price (an aggressive move against competitors' market shares)
- vii) 'downmarket' or south-west i.e. reduce both PUV and price.

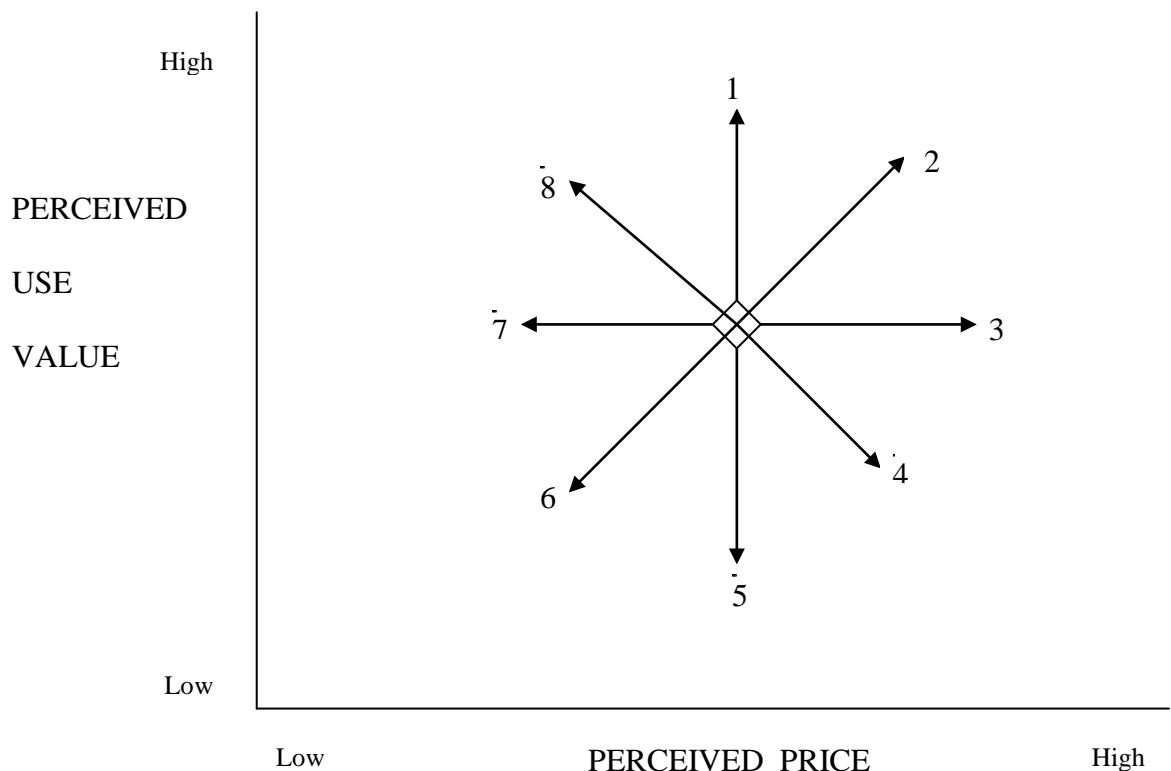
We, thus, have six strategies which are essentially market positioning strategies (the only reference for this chapter is a marketing text - Kotler, 1988), as shown in Figure 4.1, plus a seventh which is described as giving priority to cost efficiency - a production strategy that he describes as 'on its own, it is not a *competitive* strategy. It plays a role in *sustaining* either the better' or the 'cheaper' options.' (op cit p 92, emphasis in original). Thus, the orientation to marketing strategy and its prioritisation over production / cost considerations is clearly a component of the whole conceptualisation. An orientation that becomes even more evident in the next outing as the 'customer matrix'.

### 3 BOWMAN'S "CUSTOMER MATRIX".

The next representation of Bowman's thinking is that given in the 1995 textbook in the Prentice Hall Essence of Management Series '*The Essence of Competitive Strategy*' (Faulkner & Bowman, 1995). This represents a development from the charts. His new version is reproduced in Figure 4.2. overleaf. This is drawn from Bowman's own figure 2.4. titled 'Competitive strategy options'. That title implies a rounded conceptualisation of strategy. However, the fundamental market- positioning nature of his model is reflected in the fact that it is given within a chapter titled 'The Customer Matrix' and that the option descriptions focus upon price / utility type choices as with his charts. This is the first time that Bowman refers to his framework as a 'matrix', but it is not represented as a conventional matrix. Rather, his strategies are referred to as eight directional 'routes' and the representation, together with his own occasional description of moving north-east or west fits the metaphor of a compass rather better.

The axes of the matrix are as in the charts, with the addition of 'perceived' to 'price'. The labels such as 'cheaper' or 'upmarket' have been replaced by neutral numbers. Five of the original 1992 options remain. However the 'stay put' option from the 1992 text is not given, and the 'cost efficiency' dimension is subsumed as a subsidiary consideration to the viability of the option choice. That is to say that the firm's cost position vis a vis its competitors is seen, not as an option for strategic positioning, but as a determinant of the likely success of the strategic choice. Another change of note is the abandonment of an implied equifinality of the various positions, in the privileging of the 'escape the competition', or north-west 'hook' option, now simply labelled Route 8. It is described here as 'The only route that can be guaranteed to deliver an increased market share is route 8, increased PUV coupled with reduced price. However, to make this move and retain profitability, the firm must be the lowest cost producer.' (op cit p 16). Three new positions are identified ~ Routes 3 (east), 4 (south-east) and 5 (south). Whilst these are not described with great enthusiasm, they are not ruled out; more their suitability is circumscribed by market and cost contexts.

FIGURE 4.2 A REPRESENTATION OF BOWMAN'S 'CUSTOMER MATRIX'



Source: Adapted by author from Faulkner & Bowman 1995, p 14, Figure 2.4.

Despite the fact that Bowman contextualises his scheme in relation to certain empirical studies, it is not really descriptive of a kind in the sense that Miles and Snow, Porter or even Mintzberg are categorising business strategies as motivated kinds or nomenclatures. This by virtue of the fact that there is in Bowman's work no explicit or implicit claim that firms will be found that conform to, or accommodate, a set of homologating forces in the socio-economic environment of capitalistic competition that

give rise to his categories. We don't 'recognise' firms by Bowman's categories, or positions / routes, so much as set out their actual or potential actions against his framework. It is a heuristic for (marketing) strategy-making. It is a transitive subject, rather than an intransitive object.

#### 4 BOWMAN'S HEURISTIC v PORTER'S GENERIC.

##### 4.1 Strategic objectives.

Porter envisages the objective of competitive strategy as earning above average profits on a sustainable basis; his 'competitive advantage'. Albeit Bowman uses similar terminology and acknowledges the influence of Porter's earlier work, he is positioned far more towards seeing competitive advantage in terms of beating the competition in market share. Although, in many respects, the two concepts can be complementary, as where economies of scale are significant, at other times, the two are contradictory, as where market share is being 'bought' through the under-pricing of tenders. Maximising profit and maximising market share are not identical and much epistemological confusion can result from failing to appropriately discriminate between the two, especially in considering alternative classes or types of strategy. Since the identification of generic strategy is so challenging, clarity as to the grounding of the concepts employed must be solid and clear if the mental tools are to function effectively. This is not to argue that all users must classify the same - replicative validity, - merely that where this is not achieved, at least the difference is understood as a substantive difference in strategic objectives rather than a semantic confusion.

So, it is evident in many aspects of the respective texts that Bowman conceives competitive strategy differently to Porter. His application views things from a customer perspective, and is in terms of two customer-facing dimensions; perceived price and PUV. It is no less valid an approach, but it is different. Thus, Route 4 (south-east) - increasing price, whilst reducing PUV- is described as 'only feasible in a situation where there are supply constraints. Even then it is likely to lead to market disillusion, and can only be sustainable in the short term....In the longer term it is a route to decline and failure' (op cit p 15). Such comments make perfect sense from a market positioning perspective. A more rounded perspective, however, considering the best option for a firm to pursue, might consider this as a potentially attractive strategy where the conditions demand withdrawal whilst maximising returns for reinvestment elsewhere. Route 5 (south) - reducing value whilst holding price steady - might be seen as an excellent value engineering strategy for improving profitability (if one could pull it off), but is described by Bowman as an inadvertent strategy 'likely to result eventually in a reduction of market share.' (op cit p15). Most revealing is the Summary section which shows a one dimensional construction of strategy as in 'the only sustainably winning option is that which combines increased PUV with lower Perceived Price.' (op cit p 22). This reveals Route 8 as the objective; all others are, to a greater or lesser degree, ersatz.

Elsewhere in chapter 2 of Faulkner & Bowman (1995), guidance is offered to the construction of a customer matrix to assess the relative standing of a firm against its competitors. The relevant dimensions being entirely focused upon the customer's utility or satisfaction, with no mention of factor supply, value chain, or efficiency other than as necessary and subservient conditions to offering value. The subsequent chapter 'The Producer Matrix' does greatly round out the presentation of strategy, with recognition of



both contingency and resource based views of strategy, and discussion of core competences, the 'activity chain', strategic resources and gaps, etc. It also sets out the Producer Matrix as a vector of relative unit costs v key value-creating competences which are termed 'Effectiveness' and acknowledges the indirect linkage between production and the customer matrix. Thus, the overall treatment in the book achieves greater balance, with supply and production figuring in this complementary chapter to that on demand and market positioning. But, the fact remains that the generic strategies, described here as points on Bowman's customer matrix, are essentially concerned with market positioning options.

#### 4.2 Motivated kind or heuristic classification scheme ?

Consideration of whether Bowman's scheme qualifies as a motivated kind or is simply a heuristic is quite central to this thesis. But it must be acknowledged (and regretted) that such questions don't trouble most organisational and management scientists. Unfortunately, the answer is not unambiguous.

The claimed causal mechanism underpinning the Miles and Snow typology is explicitly called into play as the adaptive cycle in their account. The underlying logic drawn from microeconomic axioms for competitive markets that bring into being Porter's generic strategies are made explicit in his pedagogy. Both are, therefore, claimed here as putative motivated kinds. There is no equivalent explicit appeal to causal mechanisms or structures in Bowman's scheme. To a more limited extent, there is an implicit appeal to common sense ~ a weak form of some 'naturalness' ~ in some aspects of the way in which Bowman has presented both his charts and the customer matrix. This can be evinced in five ways:-

First, there is, at times, an axiomatic flavour to the presentation:- When, for example, Bowman writes that he assumes his illustrative set of competitors are all charging the same price for the same PUV and 'we would expect all firms to have the same market share' (Faulkner & Johnson, 1992, p 84), the reader suspends disbelief in the credibility of that assumption order to follow the argument being advanced by Bowman. One would, however, be entirely justified in rejecting the premiss put forward on the grounds that market shares do not reflect the current value for money propositions offered by competitors as much as they do the histories, reputations and resources of the various firms. This is little different from the suspension of disbelief associated with accepting, for the sake of grasping the argument and its consequences, the unrealistic conditions of perfect competition such as ease of entry and exit or substitutability upon which Porter's conceptualisation and explication of the generic strategies rely. As soon as one accedes to the quasi-theoretical fiction one is opening the way for a certain epistemic license to a quasi-scientific construal of the whole.

Secondly, there is frequent recourse to what might be termed basic commercial logic or applied basic economic reasoning in much of Bowman's descriptions of the consequences of adopting one or other of his directions. For example his route 3 on the customer matrix 'has the firm increasing prices without adding any PUV. This move can succeed in increasing profitability, but only if competitors follow suit.' .... or 'Route 4 (increasing prices and decreasing value) is only feasible in a situation where there are supply constraints. Even then it is likely to lead to market disillusion and can only be sustained in the short term.' (Faulkner & Bowman, 1995, p 15). There is, thus, a

conditionality of outcomes of strategic choice depending upon the affordances and restraints provided by the business environment that, to some (minor) degree, could be held as equivalent to the accommodation requirements of social kinds (Boyd, 1999).

Third, Bowman presents his scheme as in some manner derived from his empirical work on managers' perceptions of generic strategy. It is described as a 'conceptual framework' and is juxtaposed after a discussion of Porter's generic strategies with the tacit assumption that he was offering a (better) alternative scheme, implicitly of equivalent scope and ambition.

Fourthly, Bowman's scheme, particularly that of the 1995 customer matrix, contains a normative element. This less in terms of downplaying the viability of certain options (as with Miles & Snow's 'reactor' or Porter's 'stuck-in-the-middle'), and more in terms of his conditional privileging of Route 8. Once a performance association is projected of a category it is implicitly warranting that some internal or external factors are shaping outcomes. It is a claim to motivation of some sort.

Lastly, Bowman equips some of his strategic directions with well chosen illustrations from contemporary business behaviour ~ they are real strategies worked by real companies with real outcomes.

All this adds to a 'soft' motivation; no specific mechanism, nor appeal to theory, but a lot of circumstantial factors which, when combined with an innate 'psychological essentialism' in some of his readers, may be seen to situate the Bowman schemes as potentially motivated. However, there are no hard sortals as regards types of classification schemes and it is argued here that, since these schemes have such a strong claim to act as heuristics, that this is their prime type. There are two powerful reasons justifying this categorisation: First and foremost is the fact that this is a scheme based on sorting the world on the basis of logic. And this is the logic facing a decision-making individual or group. It is offered as a means of structuring and methodically addressing options for change (or not) of (market) positioning. Bowman's options are those created by the permutations of up - no change - or down on each of his two dimensional constructs, creating in all 9 alternative combinations. These he then examines and comments upon, but the starting point was logical analysis and the intension is optimising the decision-making processes. The second reason is that Bowman made no overt claims to (strong) motivation. Even though, in many ways, the 'adaptive cycle' is no less circumstantial than Bowman's implicit implications of (soft) motivation, as outlined above, the fact remains that Miles and Snow supplied a purported set of homologating forces in the interplay of their three components of the cycle. A mechanism of sorts was projected as behind the homologies they noted in their studies. The only mechanism required directly of Bowman's scheme is the dimensional constructs and the logic of the permutations. Thus, although Bowman's scheme has some characteristics of a motivated kind, it is principally as a simple heuristic device that its utility is examined next.

## 5 BOWMAN'S HEURISTIC V MINTZBERG'S NOMENCLATURE.

Compared to Mintzberg's comprehensive scheme of generic strategies, which set out to provide a foundational lexicon of strategic practices, Bowman's framework of (marketing) strategic choice categories is less ambitious. Mintzberg's presentation was

not normative, whilst Bowman inclines to favour certain of his options or routes as leading to increased market share. Above all, Mintzberg's scheme is complex both to represent and explicate, whilst Bowman's is well illustrated by a single diagram and is amenable to a simple exposition. However, Bowman lacked the international renown of Mintzberg. Overall, both failed to become entrenched due to a combination of intrinsic and extrinsic factors to do with their utility. This is where we look next.

## 6 EPISTEMIC AND PEDAGOGIC UTILITY.

Thus, Bowman has produced a reasoned set of generic market positioning strategy options in his 'customer matrix'. They have clear provenance and logical structure. The two dimensions of Perceived Price and Perceived Use Value are recognisable conceptually, even if challenging at times to define, requiring some contextual adjustment to the tool in its application. It is represented, compass-like, in an easily explicated and comprehended manner. Like Porter's generics, the directional options are conceived very much within a competitive market place. However, the theoretical underpinning is less contingent upon that market being highly competitive, and Bowman's presentation and accompanying narrative elicits a rather pragmatic consideration of competitors' responses. Furthermore, the pedagogic presentation of Bowman's 'Customer Matrix' requires less by way of background understanding than Porter's generics. In any application, both require grasp of competitive markets, but Porter's comes from a broader and more demanding hinterland of concepts from microeconomics. However, in one respect Porter vastly outguns Bowman ~ his classification scheme achieved entrenchment and thus discursive utility across contexts and specific communities of practice. Bowman's did not:- see Table 4.1.

TABLE 4.1. PHRASE RECOGNITION AND BOOK / ARTICLE CITATIONS.

Phrase	Recognition	Book author(s) & year	Citations.
Porter AND 'generic strategies'	4,680	M. E. Porter 1980 / 1998	9,863
Mintzberg AND 'generic strategies'	2,280	Mintzberg's article 1988	269
Bowman AND 'customer matrix'	19	Faulkner & Johnson 1992	24
Bowman AND 'producer matrix'	4	Faulkner & Bowman 1995	3

Source: Google Scholar 28<sup>th</sup> July 2011. (Search confined to 'Business, Administration, Finance and Economics'.)

In addition, it could, with justification, be claimed that the Miles and Snow typology and Porter's and Mintzberg's generics are more 'generic' than Bowman's on three grounds:-

1 Arguably, the business objective of maximising profitability is superordinate to that of maximising market share. Porter and Mintzberg adopt the wider scope.

2 There is a 'gestalt requirement' that generic strategy covers the entire organisation's efforts. The scheme for categorisation must embrace the whole organisation if it is not to be merely a functional strategy requiring still some superordinate strategy to integrate the various functions. This applies to all three comparative schemes. Within Bowman's body of work is the 'Producer Matrix' as a

complement to his 'Customer Matrix', but there is not the facility to integrate the two through a single mechanism. So it fails to achieve this overall perspective. On the other hand, Porter achieves the remarkable feat of combining the lot in an extraordinarily parsimonious scheme.

3 There is about our conventional conception of generic strategy a belief that it is something deeply rooted in the culture of the organisation, enduring and stable. Change of strategic positioning can be achieved, but only with expenditure of considerable effort, some time and, probably, some personal cost. (The literature refers to this a 'change' management'). The Miles and Snow typology and Porter's generics look the part, and Mintzberg discusses strategy as major shifts of direction embracing the whole organisation (Mintzberg & Waters 1982). By comparison, Bowman's directional conception almost implies frequent course correction. Since a new pricing strategy can be implemented overnight the inference appears that it is not profound.

Because Bowman was unable to integrate in an accessible form his 'producer matrix' with the customer matrix, his scheme was inevitably partial. On the other hand, the intrinsic potential utility of Bowman's simple scheme within the context of strategic discourse concerned with market positioning is quite evident. That it has not achieved any significant recognition, in its own right, or as adopted by others (see part two of this case study), is more circumstantial, relating to promulgation, rather than to do with inherent problems with comprehension and application.

## 7 CONCLUSIONS.

If it is accepted that one is dealing with generic market positioning strategic options in a competitive market, Bowman's customer matrix has much to commend it as a conceptual scheme listing available options for discursive purposes in strategy-making. That is to say that it offers a robust and serviceable heuristic of potentially wide application. The selection of eight positions, plus a 'stay put' option, has much to commend it as being sufficiently versatile to discriminate between strategic directions in the marketplace, without being overly complex (Miller, 1956). Yet it is also collectively exhaustive as a typology ~ logically, firms must follow one or other of the paths. The intention and extension is clear, being drawn from logic rather than from observation; boundaries being set by the user's conception of their market place and competitors. Thus, it is epistemologically sound and grounded in a plausible and accessible representation.

One must register the fact, however, that it has not achieved the intersubjective utility that comes from entrenchment. That it has failed to flourish in widespread research or practice owes something to the fact that Bowman could not command the awareness of his work achieved by Miles and Snow or Porter. Not even that achieved by Mintzberg's framework. Why that is so is, in all probability, due to a combination of factors, most of which are circumstantial:- the fact that it was put forward in the UK rather than USA, and that Bowman did not achieve the international renown required to transcend this disadvantage are of import. But so too is the fact that Bowman was less than clear about the nature of his scheme in its promulgation. In so far as it was associated with claims to an evidential base regarding Porter's generics and was unclear as to the partial nature of the business strategy being explored, Bowman may have inadvertently obscured its simplicity and ease of use as a marketing strategy heuristic.

There is also some ambiguity in Bowman's treatment as regards the performance aspects of his nine generic strategies and 'equifinality' would not describe his position. Yet, conceptually, as remarked above, equifinality might be more supportable in principle, with variations contingent upon industry/firm context. In addition, the customer matrix might benefit from further consideration of nomenclature - catchy labels do help in the promulgation of mental tools - as Miles and Snow's 'defender', 'prospecter', etc labels show. (Miles & Snow 1978). Additional, well-chosen labels, (such as was achieved by Bowman with 'no frills', 'upmarket' and 'stay put') might have assisted in the scheme's adoption..

This study has found no empirical research of any note seeking to justify or validate Bowman's work. The fact that firms can choose to operate on their price / value offerings in the way set out by Bowman is hardly worth 'proving' in such an exercise. The text provides a general description of the strategy routes and their possible implications for the firm and its competitors, drawing at times upon actual contemporary examples. This helps create plausibility, but does not aspire to provide a causal account. The strategy routes are situated in logic not 'nature'. Neither Bowman, nor general understanding of socio-economic forces, provide reasoning of why it should be that firms would conform to his strategy routes, since logic is all that is required to explicate and validate the heuristic. Yet the fact that Bowman's heuristic has no strong claim to being a motivated kind seems, surprisingly, not to have been a significant drawback to its adoption, at least in that other causes of neglect offer more proximate reasons.

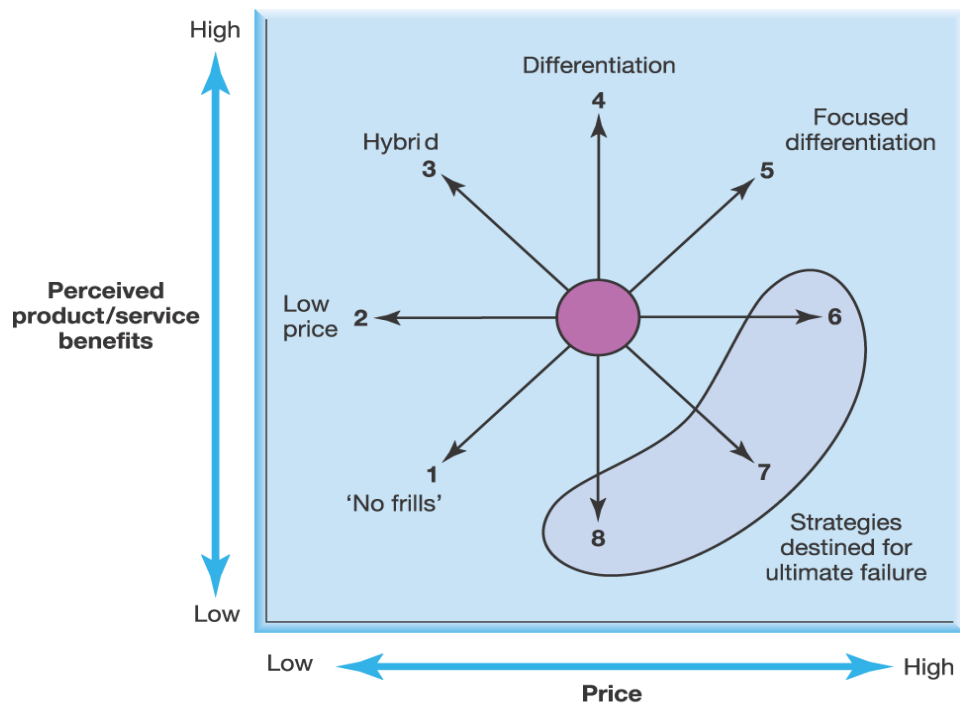
Notwithstanding the very rough equivalence of Bowman's customer matrix with the Miles and Snow typology or Porter's generics as regards potential epistemic and pedagogic utility, or its advantages of simplicity over Mintzberg's nomenclative scheme, other, very practical, considerations arise in explaining why the scheme has languished as a stand alone. But it was picked up and successfully promulgated by other British academic strategists; in particular in the 'strategy clock' ~ the next part of this case study.

## PART TWO – THE STRATEGY CLOCK

### INTRODUCTION

The representation of Bowman's work that will be familiar to many British strategists and students of strategy is through its incorporation in the leading European general textbook on strategy with over 750,000 copies sold worldwide ~ '*Exploring Corporate Strategy*' (Johnson et al 2008). The relevant section is headed 'Bases of Competitive Advantage: The "Strategy Clock"' and is given in their exhibit, 6.2 (figure 1 below) which is titled 'The Strategy Clock: Competitive strategy options'.

FIGURE 1 THE STRATEGY CLOCK.



Source: Johnson et al, 2008.

This illustration is subscribed with 'The strategy clock is adapted from the work of Cliff Bowman (see D Faulkner and C Bowman, *The essence of Competitive Strategy*, Prentice Hall, 1995). However, Bowman uses the dimension "Perceived Use Value.".

### 1.1 Bowman's version gradually subsumes Porter's generics.

In this section the history of the treatment of 'generic strategies' through the eight editions of ECS (1984-2008) is briefly explored. The first edition of 1984 did not discuss Porter's generics at all, albeit other concepts from Porter's 1980 *Competitive Strategy* were included in the book with suitable acknowledgements. In the second edition, of 1988, Porter's generics are briefly, but effectively described and illustrated using a figure taken from Porter's book. The generics are referred to as being 'of central importance' (Johnson & Scholes, 1988 p 149) and described unequivocally. In the third edition of ECS Porter's generics are again effectively summarised and illustrated. They are also described as having 'entered the language of management' (Johnson & Scholes, 1993, p 204), but the text is less positive than before, dwelling on some of the literature raising problems associated with Porter's concepts. This latter passage leading to a section where 'These and other questions are now taken up in a framework for considering generic strategies which is based on research on managers' perceptions of competitive strategy undertaken by Cliff Bowman.' (ibid, p 209). The new section 'Market-based generic strategies: the "strategy clock"', is of greater length to that devoted to Porter's generics and presents a version of Bowman's 'customer matrix' with labels (some ex Porter) similar to that given in Figure 5.1 above.

By the fourth edition, there is no separate treatment and description of Porter's generics at all. Porter's contribution to strategic options is referred to in terms of providing a language for considering the bases (sic) of competitive advantage. However, the text then reads; 'Here Porter's arguments are developed in the light of their subsequent critique by others....' (Johnson & Scholes, 1997, p253) and the text then sets out and illustrates the strategy clock, described as 'Bowman's competitive strategy options'. There is little exposition of Porter's concepts, albeit his definition of 'cost leadership' is given and, of course, the terms 'focus' and 'differentiation', used in Porter's sense, are deployed in the strategy clock. There is little relevant difference in the similar passages of the fifth edition (Johnson & Scholes, 1999).

The sixth edition (2002) carries little change to the presentation of the strategy clock, but the prefix 'market-based' or 'Bowman's' no longer figures ~ these are simply 'competitive strategy options'. Secondly, Porter's contribution to the background thinking is not acknowledged in the main text and his cost leadership definition has moved to another section on sustaining competitive advantage. Porter's work is, however, recognised as significant in the Recommended Key Readings and in the references to the chapter. (In fact Porter's 1980 and /or 1985 texts are mentioned in the key readings and references in the relevant 'options' chapter of all editions of ECS, apart from the first). The same observations apply to the seventh edition (2005). However, by the eighth edition (2008) the acknowledgement of Porter's foundational work has returned to the main body of the text, but as a lead-in to the strategy clock. i.e. 'Michael Porter proposed three different 'generic' strategies by which an organisation could achieve competitive advantage: 'overall cost leadership', 'differentiation' and 'focus'. There is much debate as to exactly what each of these categories means. In particular many confuse Porter's 'cost leadership' with 'low price'. To remove such confusions this book employs 'market-facing' generic strategies similar to those used by

Cliff Bowman and Richard D'Aveni' (Johnson et al, 2008, p 224). Apart from that reference and the (moved) reference to low cost leadership, Porter is again recognised only in the Key Readings and references sections of the chapter.

Thus, Porter's generic strategies are gradually subsumed by the strategy clock as the various editions of ECS are issued. Yet Johnson and Scholes have employed his concepts of differentiation and focus, and to a lesser extent, cost leadership throughout their treatment of the strategy clock.

## 1.2 The Strategy Clock as a construct ~ a critique.

Albeit similar in format to Bowman's representation of the customer matrix, some significant changes have been introduced in the ECS version of the strategy clock, beyond the acknowledged change to the PUV terminology (in fact 'Perceived product/service benefits' seems not to have changed the meaning intended by Bowman). Apart from the presentational differences, (for example, the numbering has changed ) there are 7 significant variations from Bowman's and also Porter's conceptualisations:-

1 There is considerable, not entirely successful, effort to reconcile the Strategy Clock with Porter's generics (which, as mentioned, are not diagrammatically represented in the ECS text after the second edition). Commenting on the confusion that arises where Porter's 'cost leadership' is conflated by others with 'low price', and, inter alia, confirming the market positioning orientation of the Strategy Clock, the authors say (continuing the quote given above):-

' To remove such confusions this book employs "market facing" generic strategies similar to those used by Cliff Bowman and Richard D'Aveni. These are based upon the principle that competitive advantage is achieved by providing customers with what they want, or need, better or more effectively than competitors. Building upon this proposition, the strategy clock..... enshrines Porter's categories of differentiation and focus alongside price.' (Johnson et al, 2008, p 224).

An overarching problem here is that Porter conceives of prices as being market determined and the leverage of the firm as more to do with cost reduction or additional product functionality enabling the firm to command higher prices in the market. In fact none of the strategy clock's options map directly onto Porter. Those labelled 3 'Hybrid', 4 'Differentiation' and 5 'Focused Differentiation' involve differentiation that as a concept (premium prices achieved upon adding 'value' at proportionately lower costs), accords broadly with Porter's conceptualisation. However, the sub-headings can fail to work (and see point 6 below). Market scope - broad or narrow - is an important dimension for Porter's overall scheme that is not encompassed in the clock's diagrammatic representation, which creates an overall incommensurability. However, the 'Focused differentiation' strategy is described in the accompanying text as 'perceived added value to a particular segment, warranting price premium' and that does coincide with Porter's Focused Differentiation. The remaining two differentiation categories are, however, compromised.

2 The treatment of 'cost strategies' point 1, No frills and point 2, Low Price differ from Porter's in ignoring scope and in being about gaining market share via price



positioning, rather than achieving profitability through cost reduction. However, they accord with Bowman's similarly described positions 6 'cheap and cheerful' and 7 'cheaper'. (But see point 6 below).

3 Bowman's 'stay put' strategy is difficult to represent within the customer matrix or strategy clock conceptualisations. Yet the framework of the strategy clock is one of market positioning (only price and PUV changes are considered) and there may be no imperative within the market environment to make a change on either of the dimensional constructs i.e. staying put may be the optimum choice (even in the face of changes by competitors). It is, therefore, unjustified (and possibly misleading) to leave the 'stay put' option out of the list of generic choices of market positioning. It is logically and practically an indispensable component of choices facing the firm.

4 One could predict that Porter would question the attainability of sustainable competitive advantage with a 'hybrid' strategy (point 3) ~ it is his 'stuck-in-the-middle' strategy. It is the strategy he would likely single out as being 'destined for ultimate failure'. Yet, as described in case study 4, this is Bowman's ultimate ideal. He writes 'Route 8 [equivalent to position 3 on the Strategy Clock] is clearly a winning strategy as the product is perceived to be both cheaper and better than those of its rivals.' (Faulkner & Bowman 1995, p 16). The conflict between the source paradigms is recognised, but left unresolved, in ECS. When describing the hybrid strategy; they observe 'Indeed, there is a good deal of debate as to whether a hybrid strategy can be a successful competitive strategy rather than a suboptimal compromise between low price and differentiation. If it is the latter, very likely it will be ineffective.' (Johnson et al, 2008, p 230).

5 Most significantly, the strategies 6-8 are now grouped under a label 'Strategies destined for ultimate failure.' The accompanying texts, both that given with Exhibit 6.2 and the general text in section 6.3 of ECS (p 224-231) support this assertion, indeed an accompanying glossary definition is provided here;- 'A failure strategy is one that does not provide perceived value for money in terms of product features, price or both.' (op cit p 231). This goes significantly further than Bowman, who a) recognises that such positions are logical consequences of his framework and offers examples of circumstances where such strategies have been adopted, whilst b) cautioning that such strategies can only work in specific circumstances and/or for a limited time.

The strategy clock presentation of Routes 6-8 as 'destined for ultimate failure' owes much to the framework's origins in the conceptualisation of the strategy question as one of maximising market share. If, instead, the objective were seen as maximising future profitability from the current position, then such strategies as increasing prices (6) or reducing benefits (8) or some mix of the two (7) are surely not simply viable options, but highly attractive to any Chief Executive seeking to maximise profit. That is to say that, whilst Routes 6-8 are not how Porter frames his generic strategies, they are commensurate with his underlying theoretical framework. In practice, increasing prices without adding value is commonplace, especially where the price elasticity of demand is less than unity, and one may observe firms adopting options such as 'withdrawal' or 'consolidation' successfully where this is appropriate to the market conditions and their relative strengths.

There is, thus, no appropriate grounds for substructing these conceptual positions generated within the framework from the list of those deemed potentially worth consideration. In fact, quite the opposite.

6 A representational difficulty with the strategy matrix is made more serious by the fact that a clock has designated points against the two axes of PUV and price, whereas Bowman's customer matrix gave them as directional arrows. One consequence is that if one 'reads' positions on the clock against the axes provided by the ECS illustration the results are such that, for example, point 4 'Differentiation' reads as an increase in PUV without any increase in price ~ certainly not the authors' intention. Or point 1 'no frills' (reduced PUV and reduced price) can be read off the clock's horizontal axis as implying higher price than point 2 'Low price' ~ again not the authors' intended meaning. The same difficulty occurs at other points. A clear case of the diagrammatic representation conveying an interpretation contradictory to the authors' intended meaning.

7 Finally, the text accompanying the Strategy Clock implies it has potential application and relevance to non-market institutions: 'For public service organisations, the equivalent concern is the bases on which the organisation chooses to achieve superior quality of services in competition with others for funding; that is how it provides "best value."' (Johnson et al, 2008, p 224). This re-representation may or may not have merit, but it is certainly not within the conceptual frameworks of goals of sustainable profitability or market share as set out by either Porter or Bowman. The brief exposition of this interpretation of significant organisational strategic objectives for non-profit organisations (such as universities or Oxfam) is inadequate to provide adequate rationale and justification for this very significant scope extension.

## 2 EPISTEMIC AND PEDAGOGIC UTILITY.

It will be clear from the above, that in terms of knowledge creation through tool application and in terms of knowledge transfer by means of pedagogic representation, the mixed model of the 'strategy clock' is deemed significantly inferior to either of the alternatives - Porter's generics or Bowman's customer matrix. There is no claim by its authors for inductive origination - the strategy clock clearly was not derived a posteriori by taxonomic means from empirical studies. The origination is clearly that of a deductive typology. Yet the strategy clock, as presented here, lacks its own accessible supporting framework derived from independent theory or fully characterised conceptualisations. It rests vicariously upon selective and partial support derived from Porter - largely decontextualised from his own corpus of work and concepts - and Bowman, again with significant variation, without explication of the mix. It is hard for third parties to divine and explicate the principles, if any, that drive the clock's mechanism. The conflation of two incommensurable classification systems, with entirely different theoretical foundations, only serves to dilute the effectiveness of either. (Boshuizen & {Tabachneck}-Schijf, 1998). Even as an 'orienting metaphor' (Chaffee, 1985), the 'strategy clock' is confusing and confused when the principles for its application are sought, making for lack of consistency between users and problems in pedagogy. It is, to adapt Porter, 'stuck in the muddle.'

Many of the points made earlier in this case study with regard to Bowman's 'soft' motivation (see section 4.2) could be called in aid as regards the Johnson et al's

presentation of the clock. However, there is little point in dwelling upon the possible motivation of the strategy clock's various positions, since the logical, theoretical and empirical warrants are so confused. The fact is that the strategy clock does not 'work' in any coherent and convincing manner to create its options. It is, at best, an attempt at a potential nomenclature and possible heuristic, that, despite its many failings, still has been regarded by many as a projectable set of categories.

This leads to consideration of a second aspect of these observations in that it reflects also upon the nature of the strategy community. From edition three of ECS, from 1993 onwards, the problems referred to above have been evident to any diligent and critical observer. That these limitations had not been properly addressed over the next 15 years in the best-selling European general textbook on strategy is something that should give cause for critical reflection. It might imply that the critique offered here is unfounded, but, assuming this is not so, there are a number of potential factors to evaluate.:-

(a) Is the general attitude to 'strategy tools', such as the strategy clock, one whereby there is an expectation that potential users expect and accept the need to adjust and adapt, such that inconsistencies are of little import? For the categories are still projectable and adjustable to our purposes.

(b) Or, is there an implicit nominalism about attitudes to categorisation of strategies that means that if Johnson and Scholes wish to label and describe this way, there is no intrinsic problem? One can take it or leave it, but there is little one can say by way of principled critique that elevates any one formulation above another.

(c) It would be the case that, as a general strategy textbook, ECS is not a text that would excite much attention from the strategy research community to critique and, since the claims for the strategy clock are 'unmotivated', little to invite empirical research.

(d) Or is it that, this being a general strategy textbook for undergraduate courses, this is simply a case where the teacher elects to substitute alternatives, such as Porter's generics (Note 2). Alternatively, the newer teacher finds the strategy clock acceptable *faute de mieux*.

### 3 ONTOLOGICAL PLAUSIBILITY

The ecological validity (Hodgkinson et al, 1999), or ontological plausibility, of a typology or taxonomy is judged against three sets of criteria - i) the classification must rest upon a sound theoretical base; ii) it must be capable of being deployed with methodological rigour; and iii) it must produce results that are practically relevant. So far the concern has been with the epistemic and pedagogic uses of the strategy clock. The question of ontological plausibility is dealt with only very briefly here since it does not arise in the way it would were the strategy clock a claimed motivated kind of strategy. To be ontologically plausible as a motivated kind a social science classification must provide an accommodation between our epistemic needs and the causal structure of the domain in which it putatively applies. (Boyd, 1999).

Like Bowman's customer matrix, Johnson et al make no overt ontological claims that the strategy clock reflects the outcome of socioeconomic forces bringing about conformity to certain categories of strategy. For example, that firms would naturally select one or other of their options or face inevitable failure. It is, instead, essentially a nomenclative and heuristic device, albeit the logic of the eight positions is less obviously simply the various permutations of:- increase / or keep unchanged / or decrease:- on price and perceived benefits dimensions of the customer matrix. 'Less obvious' due to the various inconsistencies discussed above resulting from a conflation of schemes based upon different paradigms and using mixed terminology. Also, 'less obvious' because the text is fairly discursive and associates contemporary business examples with the discussion of each option i.e. they are plausibly situated in familiar terms. And 'less obviously' so because it contains a normative element (described as implausible above, unless the goal of business strategy is identical to that of sales maximisation alone). Any classification that makes a normative claim based upon commercial success criteria is implicitly calling into play some causal economic (or socio-political) structures and mechanisms determining enterprise success and failure.

It is significant that a literature search has found no equivalent body of empirical investigation or critique of the customer matrix or strategy clock to that found relating to Porter's generics or the Miles and Snow typology. This finding is unsurprising, given the dominance of North American research in the academic literature. In addition, Porter's work was earlier than Bowman's and benefits from the reputation of Harvard and Porter's own eminence within the field. However, it should be noted that the British strategy teaching scene (particularly at undergraduate level) has been dominated by the ECS textbook. The third edition (1993) presented both Porter's generics and the strategy clock. However, the authors had dropped separate treatment of Porter's generics in sole favour of the strategy clock by the 4<sup>th</sup> edition of 1997. So, there has been plenty of time for empirical work on the validity and reliability of these alternative representations to have been reported in the peer-reviewed literature. The conclusion here is, therefore, that both the Miles and Snow typology and Porter's generics have far greater superficial ontological plausibility than either Bowman's customer matrix or the strategy clock. They have not been deemed worthy of equivalent investigation against real organisations and their strategies.

#### 4 PLACE IN THE ACADEMIC CANON

A discerning feature of a linguistic artefact when applied to a categorising generic noun is the degree to which the usage and implicit classification system to which it attaches is recognised and employed as part of an intersubjective lexicon. Here, our labels are generic strategies and our community of practice is that of 'strategists' in general. Thus, the question is that of the degree to which the terms form part of the canon of our practice. In Goodman's terms has the strategy clock become entrenched? Albeit an *argumentum ad hominem*, it seems apposite therefore to enquire how recognised are the terms 'Porter's generic strategies', and 'strategy clock' to see where each stands in relation to that part of the canon that resides in written academic form. To do so the broadly based, yet academically and professionally oriented, search engine 'Google Scholar' was deployed as in exhibit 5.1. The search domain was confined to Business, Administration, Finance and Economics, and in each case the search term was exact phrase only, except where authors' names were associated.

TABLE 5.1 WORD / TITLE RECOGNITION

Search term	No of 'hits' ( about )
Competitive advantage	967,000
Competitive advantage AND Porter	79,000
Generic strategy / strategies	8,680
Generic strategies AND Porter	6,610
Exploring corporate strategy	2,090
ECS AND Johnson OR Scholes OR Whittington	2,070
Strategy / strategic clock	103
Strategy / strategic clock AND Johnson OR Scholes OR Whittington	51

Source: Google Scholar 29<sup>th</sup> July 2011.

The most outstanding lines of this table seem to be those for term recognition associated with 'generic strategies' and Porter at over 6,500, compared with the 'strategy clock' and Johnson, Scholes or Whittington at just 50 odd. A very crude allowance for the fact that Porter's 1980 / 1998 book is better known in this data base is obtained by dividing the 6,610 times his generic strategies are recognised into the 79,000 book recognitions to give around 12 to one ratio. The comparative ratio for the strategy clock and the ECS text is around 40, indicating that the strategy clock is comparatively under-represented in research that employs the ECS text in one form or another.

That Porter's generics would figure more prominently than the strategy clock is of no surprise. A poll by the Strategic Management Society in 1999 voted Porter as the most influential scholar in that field in the past quarter century (Barney, 2002). That his books on strategy should be so well recognised is likewise unsurprising ~ the 1980 text had been re-printed over 53 times and translated into 17 languages by 2002 (Argyres & McGahan, 2002). However, the citations to Bowman's and Johnson et al's strategy classification schemes, (see above and Table 4.1) disappoint in terms of academic quality and nature of use. In the main, it appears these nomenclative and heuristic classification schemes have been little used in strategy research. Thus, whilst Porter's generics are central to the strategy canon, Bowman's and Johnson et al's schemes are somewhat peripheral. However, no account of in-company use (after all the prime object of a heuristic) has been undertaken. Had it been, and in the UK, there is little doubt that the 'strategy clock' would be recognised by many practitioners.

## 5 DISCUSSION – BOWMAN, PORTER, AND THE 'STRATEGY CLOCK'

Both Porter and Bowman suggest typologies with discernable theoretical or principled foundations, yet both are somewhat weak on clarifying their warrants and claims through attaching appropriate scope conditions thereto. Porter's generics, being based upon the axiomatic systems and stylised facts of microeconomics has, perhaps, greater depth and nomological or predictive validity. It is a purported motivated kind. Porter's generics are put forward within a normative framework of 'choose one of these

three or four paths' to achieve sustainable competitive advantage and don't be less than wholehearted in that choice if you wish to avoid being 'stuck in the middle'. That nomological characteristic has two consequences. First, the linkage between generic strategies, industry structure and firm performance will attract the attention of both researchers and practitioners / consultants seeking the ingredients of competitive advantage. Which leads to the second, that Porter's generics have attracted a host of academic researchers attempting to establish the ontological plausibility of his typology through correlations, regressions, causal modelling, cluster analysis, and the like. However, this empirical assault on the typology may be an underestimate, on the one hand of the heterogeneous, complex and multifaceted nature of 'strategy' and 'competitive advantage', and, on the other, the specific, but tacit, theoretical conditions of competition that underpins the concepts which underpin the typology.

On the other hand, Bowman's typology is not under suspicion, since it has hardly been investigated and reported upon in the academic literature. It is only weakly motivated as discussed here and acts more as a heuristic with associated nomenclative value in the designated directions. Bowman's customer matrix has had far less exposure than even the 'strategy clock' and has, perhaps, both benefitted and suffered as a consequence. Moreover the lack of effective linkage between his empirical work on Porter's generic strategies and his own charts or the customer matrix means that it is not a genuine observational product, but an a priori typology ~ a set of labels of heuristic potential. Thus, follow-up validation research work, replications and extensions, has just not followed. The more rigorous version of the construct has not been tested by third parties; at least not as reported in the relevant literature. As the two dimensional matrix - i.e. shorn of its associations with cost reduction strategies - it has a logical and straightforward appeal. The conditions for application - the identification and categorisation criteria - are relatively straightforward; one follows short, simple principles. Within the scope conditions of market positioning strategy (for competitive markets), the typology is collectively exhaustive and the whole scheme is internally consistent. Bowman provides relatively little by way of characterisation and exemplars and, had he done so, the fact that all 9 positions are logically tenable and, moreover, found in strategic practice might have been more evident.

Bowman's typology is, however, one of market positioning, a necessary but not sufficient ingredient of 'strategy'. For the latter to work as an integration of both supply conditions and marketing strategy within the organisation another dimension, that of production positioning has to be offered. This is recognised in the 'The Producer Matrix' which accompanies the exposition of the customer matrix in Bowman's writings. Here he posits a scheme based upon the relative unit costs of production and the key value-creating competences or the effectiveness. There is here, perhaps, an incipient, fully characterised, generic strategy typology waiting to be explored. One that reconciles the positioning and resource-based views of strategy. This, however, would require a complementary production positioning typology (based upon such features as comparative resource costs; cost control / reduction / elimination; R&D, engineering and plant investment; new product development; collaborative ventures and networks; etc; etc.) that has yet to be developed with the inherent simplicity of the customer matrix as described above.

The impetus to this research was a certain frustration with the 'strategy clock' which has been excised with the conclusion that it is an unsuccessful conflation of the

conceptual schemes of two strategists. Michael Porter's generic strategies are well known, but the original work of Cliff Bowman was unfamiliar. The two schemes have not blended successfully in the 'strategy clock', which has been consigned to the category of 'stuck in the muddle'. However, it is hoped that this work is suggestive to others that the heuristic scheme offered by Cliff Bowman is worthy of further theoretical and empirical research.

## REFERENCES - ALL CHAPTERS.

Abell, D F 1980 *Defining the business: the starting point of strategic planning*. Englewood Cliffs, New Jersey: Prentice Hall Inc.

Abercrombie, M. 1960/ 1979. *The anatomy of judgement: an investigation into the process of perception and reasoning*. London. Hutchinson / Penguin Books.

Abrahamson, E 1996 Management fashion. *Academy of Management Review*. 21 1 : 254-285.

Abrahamson, E & Fairchild, G. 1999. Management fashion: lifestyles, triggers and collective learning processes. *Administrative Science Quarterly*. 44. 4. 708-740.

Ackroyd, S & Hughes, J. 1992 *Data Collection in Context*. Harlow, Essex. Longman.

Ackroyd, S & Fleetwood, S. (eds). 2000. *Realist perspectives on management and organisations*. London. Routledge.

Ahn, W-K; Kalish, C; Gelman, S; Medin, D; Luhmann, C; Atran, S Coley, J; & Shafto, P. Why essences are essential in the psychology of concepts. *Cognition*. 82. 59-69.

Aitkenhead, A. & Slack, J. (eds) 1985. *Issues in cognitive modelling*. London. Lawrence Erlbaum Associates.

Ali Khalidi, M.1998. Natural kinds and crosscutting categories. *Journal of Philosophy*. 95. 1. 33-50.

Andrews, R; Boyne,G; Law, J; & Walker, R. 2009. Strategy, structure and process in the public sector: a test of the Miles and Snow model. *Public Administration*. 87. 4. 732-749.

Ansoff, H. I, 1965. *Corporate Strategy*. New York, McGraw-Hill.

Ansoff, H. I. 1991. Critique of Henry Mintzberg's 'The design school: reconsidering the basic premises of strategic management.' *Strategic Management Journal*. 12. 6. 449-461.

Aragon-Sanchez, A & Sanchez-Marin, G. 2005 Strategic Orientation, Management Characteristics, and Performance: A Study of Spanish SMEs. *Journal of Small Business Management*. 43, 3 : 287-308.

Argyres, N & McGahan, A. 2002. Introduction: Michael Porter's competitive strategy. *Academy of Management Executive*. 16. 2. 41-2.

Astley W G & Zammuto R F 1992 Organisation science, managers and language games. *Organisation Science*. 3. 4 : 443-460.

Auh, S & Menguc, B. 2005. Balancing exploration and exploitation : The moderating role of competitive intensity. *Journal of Business Research*. 58. : 1652-1661.



- Aunger, R. & Curtis, V. 2008. Kinds of behaviour. *Biology and Philosophy*. 23. 3. 317-345.
- Austin, J. 1955 (1976) *How to do things with words*. Oxford. Oxford University Press.
- Bailey, K.D. 1984. A Three-Level Measurement Model. *Quality and Quantity*. 18.: 225-245.
- Bailey, K. D. 1994. *Typologies and Taxonomies: An Introduction to Classification Techniques*. No 102 in series Quantitative Applications in the Social Sciences. Thousand Oaks. Sage Publications Inc.
- Bakir, A & Bakir, V 2006 Unpacking complexity, pinning down the “elusiveness” of strategy ; a grounded theory study in leisure and cultural organisations. *Qualitative Research in Organisations*. 1.3. 152-172.
- Barney, J. 2002. Strategic management: from informal conversation to academic discipline. *Academy of Management Executive*. 16. 2. 53-7.
- Barney, J; & Hoskisson, R. 1990. Strategic groups: untested assertions and research proposals. *Managerial and Decision Economics*. 11. 187-198.
- Bartlett, C & Ghoshal, S. 1998. *Managing across borders: the transnational corporation*. Boston, MA. Harvard Business School Publications.
- Barrett, H Clark. 2001. On the functional origins of essentialism. *Mind and Society*. 3. 2. 1-30.
- Beebee, H & Sabbarton-Leary, N (eds). 2010. *The semantics and metaphysics of natural kinds*. Abingdon, Oxon. Routledge.
- Belsey, C. 2002. *Poststructuralism: a very short introduction*. Oxford. Oxford University Press.
- Ben-Yami, H. 2001. The semantics of natural kind terms. *Philosophical Studies*. 102. 2. 155-184.
- Berger, P L & Luckman T. 1966 *The Social Construction of Reality*. London. Penguin Books.
- Besanko, D; Dranove, D; Shanley, M; & Schaefer, S. 2007 (4<sup>th</sup> ed) *Economics of strategy*. Hoboken, NJ. John Wiley & Sons.
- Bhaskar, R. 1979. *The possibility of naturalism: a philosophical critique of the contemporary human sciences*. Brighton. The Harvester Press.
- Biletzki, A & Matar, A. 2009. *Ludwig Wittgenstein*. Stanford Encyclopedia of Philosophy. (May 2009). <http://plato.stanford.edu/entries/wittgenstein/>

- Blaikie, N. 2000. *Designing Social Research*. Cambridge. Polity Press.
- Boersema, D. 2009. *Pragmatism and reference*. Cambridge, MASS. The MIT Press.
- Bogaert, S; Boone, C; & Carroll, G. 2010. Organisational form emergence and competing professional schemata of Dutch accounting, 1884-1939. In Hsu, G; Negro, G; & Kocak, O. (eds) 2010. *Categories in markets: origins and evolutions. Research in the Sociology of Organisations. Vol 31*. Bingley, UK. Emerald Group.
- Bognor, W; Thomas, H; McGee, J. 1996. A longitudinal study of the competitive positions and entry paths of European firms in the US pharmaceutical industry. *Strategic Management Journal*. 17. 2. 85-107.
- Boje, D; Gephart, R; & Thatchenkery, T. (eds).1996 *Postmodern management and organisation theory*. Thousand Oaks, CA. Sage Publications.
- Boshuizen, H & (Tabachneck-)Schijf, H 1998 Problem Solving with Multiple representations by Multiple and Single Agents: An Analysis of the Issues Involved. In Someren et al ( Eds )1998. *Learning with Multiple Representations*. Oxford. Pergamon
- Bostrom, N. 2002 *Anthropic Bias: Observation selection effects in science and philosophy*. New York. Routledge.
- Boulianne, E. 2007. Revisiting fit between AIS design and performance with the analyser strategic type. *International Journal of Accounting Information Systems*. 8, 1 :1-16.
- Bowker, G. & Star, S. 1999. *Sorting things out: classification and its consequences*. Cambridge, MA. The MIT Press.
- Bowman, C. & Ash, D. 1987. *Strategic management*. Basingstoke. The Macmillan Press.
- Bowman, C. 1991. *Charting competitive strategy*. Cranfield. Cranfield University SWP 33/91.
- Bowman, C. & Faulkner, D. 1997. *Competitive and corporate strategy*. London. Irwin.
- Bowman, C. 2003. Formulating strategy. In Faulkner, D. & Campbell, A. (eds) *Oxford Handbook of Strategy. Vol 1. A strategy overview and competitive strategy*. Oxford. Oxford University Press.
- Boyd, R. 1991. Realism, anti-foundationalism and the enthusiasm for natural kinds. *Philosophical Studies*. 61. 127-148.
- Boyd, R. 1999(a). Kinds, complexity and multiple realisation: comments on Millikan's 'Historical kinds and the "special sciences"'. *Philosophical Studies*. 95. 67-98.
- Boyd, R. 1999(b). Homeostasis, species and higher taxa. In Wilson, R. (ed) *Species: new interdisciplinary essays*. Cambridge, MA. The MIT Press.

- Boyd, R. 2010. Realism, natural kinds, and philosophical methods. In Beebee, H. & Sabbarton-Leary, N. (eds) *The semantics and metaphysics of natural kinds*. Abingdon, Oxon. Routledge.
- Braisby, N. 2005. Concepts. In Braisby, N. & Gellatly, A (eds). *Cognitive psychology*. Oxford. Oxford University Press.
- Burke, P. 2000. *A social history of knowledge; from Guttenberg to Diderot*. Cambridge. Polity Press.
- Byrnes, J. 1996. *Cognitive development and learning in instructional contexts*. Massachusetts. Allyn & Bacon; Simon Schuster.
- Caldwell, B. 2002. In defense of basic economic reasoning. *Post-autistic economics review*. 13. May 2, 2002. article 4. [http://www.btinternet.com/~pae\\_news/review/issue13.htm](http://www.btinternet.com/~pae_news/review/issue13.htm)
- Campbell-Hunt, C. 2000. What have we learned about competitive strategy: a meta analysis. *Strategic Management Journal*. 21. 2. 127-154.
- Candish, S & Wrisley, G. 2008. Private language. Stanford Encyclopedia of Philosophy. (September 2008). <http://plato.stanford.edu/entries/private-language/>
- Carlzon, J. 1987 *Moments of truth*. New York. Harper & Row.
- Carlton, D. & Perloff, J. 2005 (4<sup>th</sup> ed). *Modern industrial organisation*. Boston. Pearson Addison Wesley.
- Carper W B & Snizek W E 1980 The Nature and Types of Organizational Taxonomies : An Overview. *Academy of Management Review* 5, 1 : 65-75.
- Caves, R.E. & Porter, M.E. 1977. From entry barriers to mobility barriers: conjectural decisions and contrived deterrence to new competition. *Quarterly Journal of Economics*. 241-261.
- Caves, R.E. & Porter, M.E. 1978. Market structure, oligopoly and stability of market shares. *Journal of Industrial Economics*. 26. 4 (June). 289-313.
- Caves, R.E. 1980. Industrial organisation, corporate strategy and structure. *Journal of Economic Literature*. 18 (March). 64-92.
- Caves, R.E. 1984. Economic analysis and the quest for competitive advantage. *American Economic Review*. 74.2. 127-132.
- Caves, R.E. & Williamson, P.J. 1985. What is product differentiation really ? *Journal of Industrial Economics*. 34. 2. (Dec) 113-132.
- Chaffee E.A. 1985 Three Models of Strategy. *Academy of Management Review* 10. 1 : 89-98

Chakravarthy, B. 1982. Adaptation : A promising metaphor for strategic management. *Academy of Management Review* 7,1. : 35-44

Cheng, K-Y. 2010 A new look at the problem of rule-following: a generic perspective. *Philosophical Studies*. Published online 12 May 2010.

Child, J. 1972. Organisational structure, environment and performance: the role of strategic choice. *Sociology*. 6 : 1-22.

Child J 1995 Guest editorial. *Organisation Science*. 6.1 : 117-118

Chrisman J J, Hofer C W & Boulton W R. 1988 Toward a System for Classifying Business Strategies. *Academy of Management Review* 13, 3 : 413-428

Cimpian, A; Gelman, S; Brandone, A. 2010. Theory-based considerations influence the interpretation of generic sentences. *Language and Cognitive Processes*. 25.2.261-276.

Cohen, A. 2004. generics and mental representations. *Linguistics and Philosophy*. 27. 529-556.

Coley, J; Medin, D; Proffitt, J; Lynch, E; & Atran, S. 1999. Inductive reasoning in folkbiological thought. In Medin & Atran (eds) *Folkbiology*. Cambridge. MA. The MIT Press.

Collins, H. & Evans, R. 2007. *Rethinking expertise*. Chicago. University of Chicago Press.

Conant J, Mokwa M & Varadarajan P R. 1990 Strategic Types, Distinctive Marketing Competencies and Organisational Performance : A Multiple Measures-Based Study. *Strategic Management Journal* 11, 5, : 365-383.

Cooke B; Mills A J: & Kelley 2005 Situating Maslow in cold war America: a recontextualisation of management theory. *Group & Organisation Management*. 30.2 : 129-152.

Cronshaw, M; Davis, E; & Kay, J. 1994. On being stuck in the middle or good food costs less as Sainsbury's. *British Journal of Management*. 5.1. 19-32.

Crossan, M & Guatto, T 1996 Organisational learning research profile. *Journal of Organisational Change Management*. 9. 1 : 107-112.

Cumming, S. 2009. *Names*. Stanford Encyclopedia of Philosophy. (January 2009) <http://plato.stanford.edu/entries/names/>

Daft R.L. & Weick K.E. 1984 Toward a Model of Organisations as Interpretation Systems. *Academy of Management Review*. 9, 2 : 284-295.

Danermark, B; Ekstrom, M; Jakobsen, m; & Karlsson, J. 2002 (English ed.) *Explaining society: critical realism in the social sciences*. Abingdon. Routledge.

Dess, G & Davis, P. 1984. Porter's (1980) generic strategies as determinants of strategic group membership and organisational performance. *Academy of Management Journal*. 27. 3. 467-488.

DeSarbo, W & Grewal, R. 2008. Hybrid strategic groups. *Strategic Management Journal*. 29. 293-317.

DeSarbo, W; Di Benedetto, C; Jedidi, K; & Song, M. 2006. Identifying Sources of Heterogeneity for Empirically Deriving Strategic Types: A Constrained Finite-Mixture Structural-Equation Methodology. *Management Science*. 52, 6 : 909-924.

DeSarbo, W; Di Benedetto, C; Song, M; & Sinha, I. 2005. Revisiting the Miles and Snow Strategic Framework: Uncovering Interrelationships between Strategic Types, Capabilities, Environmental uncertainty, and Firm Performance. *Strategic Management Journal*. 26. : 47-74.

DeVellis, R. 1991. *Scale Development: Theory and Applications*. Newberry Park, CA. Sage Publications Inc.

De Wit B & Meyer R 1994 ( 1<sup>st</sup> ed) 1998 ( 2<sup>nd</sup>). *Strategy: Process, content, context. An international perspective*. (1<sup>st</sup> ed) St Paul, MN. West Publishing Company. (2<sup>nd</sup>) London. International Thompson Business Press.

Diesendruck, G & Haber, L. 2009. God's categories: the effect of religiosity on children's teleological and essentialist beliefs about categories. *Cognition*. 110. 1. 100-114.

DiMaggio P & Powell W. 1983 The iron cage revisited; institutional isomorphism and collective rationality in organisational fields. *American Sociological Review*. 48. 2 : 147-160.

DiMaggio P. 1995. Comments on " what theory is not". *Administrative Science Quarterly*. 40. 3 . 391-397.

Doty, D.H; Glick, W.H; & Huber, G.P. 1993. Fit. Equifinality, and Organisational Effectiveness: A test of Two Configurational Theories. *Academy of Management Journal*. 36, 6. : 1196-1250.

Doty H D & Glick W H 1994 Typologies as a Unique Form of Theory Building : Toward Improved Understanding and Modeling. *Academy of Management Review*. 19, 2 p 230-251.

Dupré, J. 1993. *The disorder of things: metaphysical foundations of the disunity of science*. Cambridge, MASS. Harvard University Press.

Dupré, J. 1999. Are whales fish ? In Medin, D. & Atran, S. (eds) *Folkbiology*. Cambridge, MASS. The MIT Press.

Dupré, J. 2002. *Humans and other animals*. Oxford. Clarendon Press.

Easterby-Smith, M; Thorpe, R; & Loew, A. 1991. *Management research: an introduction*. London. SAGE Publications.

Eco, U. 2000. *Kant and the platypus: essays on language and cognition*. London. Vintage.

Eisenhardt K & Zbaracki M J 1992 Strategic decision making. *Strategic Management Journal* 13 Special Issue 17-37.

Elder-Vass, D. 2007. Luhmann and emergentism: competing paradigms for social systems theory. *Philosophy of the Social Sciences*. 37. 4. 408-432.

Elder-Vass, D. 2010. *The causal power of social structures: emergence, structure and agency*. Cambridge. Cambridge University Press.

Engelskirchen, H. 2011. *Capital as a social kind.: definitions and transformations in the critique of political economy*. Abingdon, Oxfordshire. Routledge.

Evans, J.D. & Green, C.L. 2000. Marketing strategy, constituent influence and resource allocation; an application of the Miles and Snow typology to closely held firms in Chapter 11 bankruptcy. *Journal of Business Research*. 50. : 225-231.

Faulkner, D. & Bowman, C. *The essence of competitive strategy*. Hemel Hempstead. Prentice Hall Europe.

Faulkner, D. & Johnson, G. *The challenge of strategic management*. London. Kogan Page.

Fish, S. 1989. Being interdisciplinary is so very hard to do. *Profession*. 89.

Fleetwood, S. 2005. Ontology in organisation and management science: a critical realist perspective. *Organisation*. 12. 2. 197-222.

Fodor, J. 1974. Special sciences (or the disunity of science as a working hypothesis). *Synthese*. 28. 2. 97-115.

Foss, N. 1996. Research in strategy, economics and Michael Porter. *Journal of Management Studies*. 33. 1. 1-24.

Franklin-Hall, L. 2001. Plato's joints. <http://www.columbia.edu/~lrf2001/platosjoints> (Accessed 29/5/2009).

Fullbrook, E. (ed) 2009. *Ontology and economics: Tony Lawson and his critics*. Abingdon. Routledge.

Galbraith, C. & Schendel, D. 1983 An Empirical Test of Strategy Types. *Strategic Management Journal*. 4, 2, : 153-173.

- Gelman, S. 2003. *The essential child: origins of essentialism in everyday thought*. New York. Oxford University Press.
- Gephart, R. 1996. Simulacral environments: reflexivity and the natural ecology of organisations. In Boje, D; Gephart, R; & Thatchenkery, T. (eds).1996 *Postmodern management and organisation theory*. Thousand Oaks, CA. Sage Publications.
- Gergen, K J. & Whitney, D. 1996. Technologies of Representation in the Global Corporation: Power and Polyphony. In Boje et al ( eds ) *Postmodern Management and Organisation Theory*. Thousand Oaks, California. Sage Publications Inc.
- Gerring, J. 1999. What makes a concept good ? A criterial framework for understanding concept formation in the social sciences. *Polity*. 31. 3. 357-393.
- Ghobadian, A; James, P; Liu, J; & Viney, H. 1998. Evaluating the applicability of the Miles and Snow typology in a regulated public utility environment. *British Journal of Management*. Vol 9. S71-S83.
- Gimenez, F. 2000. The benefits of a coherent strategy for innovation and corporate change; a study applying Miles and Snow's model in the context of small firms. *Creativity and Innovation Management*. 9, 4. : 235-244.
- Gindis, D. 2009. From fictions and aggregates to real entities in the theory of the firm. *Journal of Institutional Economics*. 5 .1. 25-46.
- Glaser, B & Strauss, A. 1967. *The discovery of grounded theory*. Chicago. Aldine Press.
- Goodman, N. 1978. *Ways of worldmaking*. Indianapolis, IN. Hackett Publishing.
- Goodman, N. 1983 (4<sup>th</sup> ed). *Fact, fiction and forecast*. Cambridge, MASS. Harvard University Press.
- Goold, M & Campbell, A. 1987. *Strategies and styles*. Oxford. Blackwell.
- Gosling, J. 1994. Interview with Henry Mintzberg (McGill University) and Shelia Forbes (Reed Elsevier) *Management Learning*. 25. 1. 95-104.
- Goswami, U. 2008. *Cognitive development.: the learning brain*. Hove, East Sussex. Psychology Press.
- Grandy, G & Mills, A. 2004. Strategy as simulacra ? A radical reflexive look at the discipline and practice of strategy. *Journal of Management Studies*. 41. 7. 1153-1170.
- Grandy, R. 2007. *Sortals*. Stanford Encyclopedia of Philosophy (April 2007). <http://plato.stanford.edu/entries/sortals/>
- Grant, R. 2002. *Contemporary Strategic Analysis*. Oxford. Blackwell Publishers Ltd.

- Gregor, S. 2006 The Nature of Theory in Information Systems. *MIS Quarterly*. 30, 3 : 611-642.
- Greiner, L. 1972. Evolution and revolution as organisations grow. *Harvard Business Review*. July-August. 37-46.
- Hacking, I. 1981. Do we see through a microscope ? *Pacific Philosophy Quarterly*. 62. 305-322.
- Hacking, I. 1991(a). A tradition of natural kinds. *Philosophical Studies*. 61. 109-126.
- Hacking, I. 1991(b). On Boyd. *Philosophical Studies*. 61. 149-154.
- Hacking, I. 1997. Searle, reality and the social. *History of the Human Sciences*. 10. 4. 83-92.
- Hacking, I. 1999. *The social construction of what ?* Harvard, MASS. Harvard University Press.
- Hacking, I. 2002 (a). Inaugural lecture: Chair of Philosophy and History of Scientific Concepts at the College de France, 16 January 2001. *Economy and Society*. 31. 1. 1-14.
- Hacking, I. 2002(b). How 'natural' are 'kinds' of sexual orientation ? *Law and Philosophy*. 21. 95-107
- Hamblyn, R. 2001. *The invention of clouds: how an amateur meteorologist forged the language of the skies*. London. Picador.
- Hambrick, D. 1981 Strategic Awareness Within Top Management Teams. *Strategic Management Journal*. 2, 3 : 263-279
- Hambrick, D. 1983 Some tests of the effectiveness and functional attributes of the Miles and Snow strategic types. *Academy of Management Journal*. 26, 1 : 5-26.
- Hambrick, D. 1984(a) Taxonomic Approaches to Studying Strategy: Some Conceptual and Methodological Issues. *Journal of Management* 10, 1. : 27-41
- Hambrick, D. 1984(b) An empirical typology of mature industrial-product environments. *Academy of Management Journal*. 26, 2 : 213-230.
- Hambrick, D. 2003 On the staying power of Defenders, Analysers and Prospectors. *Academy of Management Executive*. 17, 4. : 115-118.
- Handy C 1993(4<sup>th</sup> ed) *Understanding organisations*. London. Penguin.
- Hannan, M & Freeman, J. 1977. The population ecology of organisations. *American Journal of Sociology*. 82. 929-964.
- Hannan, M & Freeman, J. 1986. Where do organisational forms come from ? *Sociological Forum*. 1. 1. 50-72.



Harré, R. 2002 (a) *Cognitive science: a philosophical introduction*. London. SAGE Publications.

Harré, R. 2002 (b) Material objects in social worlds. *Theory, Culture & Society*. 19. 5-6. 23-33.

Harré, R. & Madden, E. 1975. *Causal powers: a theory of natural necessity*. Oxford. Basil Blackwell.

Harrigan, K.R. 1983. Research methodologies for Contingency Approaches to Business Strategy. *Academy of Management Review*. 8, 3. : 398-405.

Haslam, N; Rothschild, L; & Ernst, D. 2000. Essentialist beliefs about social categories. *British Journal of Social Psychology*. 39. 113-127.

Hawes, J. & Crittenden, W. 1984. A taxonomy of competitive retailing strategies. *Strategic Management Journal*. 5. 275-287.

Hax, A. 1990. Redefining the concept of strategy and the strategy formulation process. *Planning Review*. May/June. 34-40.

Hessler, R M. 1992 *Social Research Methods*. St Paul MN. West Publishing Company.

Hill, C W L. 1988 Differentiation versus low cost or differentiation and low cost: a contingency framework. *Academy of Management Review* 13. 3. 401-412.

Hodgkinson, G; Brown, N; Maule, J; Glaister, K; & Pearman, A. 1999. Breaking the frame; an analysis of strategic cognition and decision making under uncertainty. *Strategic Management Journal*. 20. 977-985.

Hofstede G 1994 Management scientists are human. *Management Science*. 40 1 : 4-13.

Hsu, G; Negro, G; & Kocak, O. (eds) 2010. *Categories in markets: origins and evolutions*. *Research in the Sociology of Organisations*. Vol 31. Bingley, UK. Emerald Group.

Hubbard, R; Vetter, D; & Little, E. 1998 Replication in strategic management : scientific testing for validity, generalizability, and usefulness. *Strategic Management Journal*. 19, 3 : 243-254.

Huggins, R & Izushi, H. (eds). 2011. *Competition, competitive advantage and clusters: the ideas of Michael Porter*. Oxford. Oxford University Press.

Huczynski, A. A. 1993 *Management gurus - what makes them and how to become one*. London. Routledge.

Iacocca, L with Novak, W. 1985 *Iacocca: an autobiography*. London. Sidwick & Jackson.

ISI Web of Knowledge 2007 *Social Sciences Citation Index*. Thompson.

James, W & Hatten, K. 1995 Further evidence on the Validity of the Self Typing Paragraph Approach: Miles and Snow Strategic Archetypes in Banking. *Strategic Management Journal*. 16, 2 : 161-168.

Jarzabkowski, P. 2004. Strategy as practice; recursiveness, adaptation and practices-in-use. *Organisation Studies*. 25. 4. 529-560.

Jarzabkowski P & Wilson D 2006 Actionable strategy knowledge: a practice perspective. *European Management Journal*. 24. 5 : 348-367

Jarzabkowski P; Balogun J; & Seidl D 2007. Strategising: the challenges of a practice perspective. *Human Relations* 60. 1 : 5-27.

Johnson, G & Scholes, K 1984 ( 1<sup>st</sup> ed) 1988 (2<sup>nd</sup>) 1993 (3<sup>rd</sup>) 1997 (4<sup>th</sup>) 1999 (5<sup>th</sup>) 2002 (6<sup>th</sup>). *Exploring Corporate Strategy*. (1<sup>st</sup> ed) London. Prentice Hall. (2<sup>nd</sup>, 3<sup>rd</sup>) Hemel Hempstead, Hertfordshire. Prentice Hall International. (4<sup>th</sup>) Hemel Hempstead, Hertfordshire. Prentice Hall Europe. (5<sup>th</sup>) Harlow, Essex. Prentice Hall Europe. (6<sup>th</sup>) Harlow, Essex. Pearson Education.

Johnson, G; Scholes, K & Whittington R 2005 (7<sup>th</sup> ed), 2008 (8<sup>th</sup> ed). *Exploring Corporate Strategy*. Harlow, Essex. Pearson Education.

Johnson, G, Whittington, R & Scholes, K. (9<sup>th</sup> ed). *Exploring strategy*. Harlow, Essex. Pearson Education.

Kald M, Nilsson F & Rapp B. 2000 On Strategy and Management Control : The importance of Classifying the Strategy of the Business. *British Journal of Management*. Vol 11. : 197-212.

Kay, J. 1995. *Foundations of corporate success: how business strategies add value*. Oxford. Oxford University Press.

Kearns, G. S. 2005. An electronic commerce strategic typology: insights from case studies. *Information and Management*. 42, 7. : 1023-1036.

Ketchen, D & Shook, C. 1996 The application of cluster analysis in strategic management research : an analysis and critique. *Strategic Management Journal* 17, 6. 441-458.

Ketchen, D J Jr. 2003 An interview with Raymond E Miles and Charles C Snow. *Academy of Management Executive*. 17, 4. : 97-104

Kim, L. & Lim, Y. 1988. Environment, generic strategies and performance in a rapidly developing country; a taxonomic approach. *Academy of Management Journal*. 31, 4. p 802-827.

Knights, D. & Morgan, G. 1991. Corporate strategy, organisations, and subjectivity : a critique. *Organisation Studies*. 12, 2 : 251-273.

Knorr Cetina, K. 1991. Epistemic cultures: forms of reason in science. *History of Political Economy*. 23 .1. 105-122.

Kotler, P. 1988. (6<sup>th</sup> ed). *Marketing management: analysis, planning, implementation and control*. New Jersey. Prentice Hall.

Kovács, B & Hannan, M. 2010. The consequences of category spanning depend on contrast. In Hsu, G; Negro, G; & Kocak, O. (eds) 2010. *Categories in markets: origins and evolutions. Research in the Sociology of Organisations. Vol 31*. Bingley, UK. Emerald Group.

Kripke, S. 1980. *Naming and necessity*. Oxford. Basil Blackwell.

Kuhn T 1970(2<sup>nd</sup> ed) *The structure of scientific revolutions*. Chicago. The Chicago University Press.

Lakoff, G. 1987. *Women, fire, and dangerous things*. Chicago. The University of Chicago Press.

Lakoff, G & Johnson, M. 1980 (2003). *Metaphors we live by*. Chicago. The University of Chicago Press.

Lambe, P. 2007. Organising knowledge: taxonomies, knowledge and organisational effectiveness. Oxford. Chandos Publishing.

LaPorte, J. 2006. Rigid designators. Stanford Encyclopedia of Philosophy. (October 2006). <http://plato.stanford.edu/entries/ridid-designators/>

Lawrence P & Lorsch J 1979 *Organisation and environment*. New York. Irwin.

Lawson, T. 1997. *Economics and reality*. Abingdon. Routledge.

Lawson, T. 2003. *Reorientating economics*. Abingdon. Routledge.

Lazarsfeld, P & Henry, N 1968 *Latent structure analysis*. Boston, USA. Houghton Mifflin Company.

Leslie, S-J. 2008. Generics; cognition and acquisition. *Philosophical Review*. 117.1.1-47.

Levett, B & Nass, C. 1989. The lid on the can: institutional constraints on decision making in the technical core of college-textbook publishers. *Administrative Science Quarterly*. 34. 2. 190-207.

Locke, K. 2001. *Grounded theory in management research*. Thousand oaks, CA. Sage Publications.

- Lopez, A; Atran, S; Coley, J; Medin, D; & Smith, E. 1997. The tree of life: universal and cultural features of folkbiological taxonomies and inductions. *Cognitive Psychology*. 32. 3. 251-295.
- Lounsbury, M. 2007. A tale of two cities; competing logics and practice variation in the professionalizing of mutual funds. *Academy of Management Journal*. 50. 2. 289-307.
- Lounsbury, M & Rao, H. 2004. Sources of durability and change in market classifications: a study of the reconstitution of product categories in the American mutual fund industry, 1944-1985. *Social Forces*. 82. 3. 969-999.
- Lynch, M. 2004. Truth and multiple realisability. *Australian Journal of Philosophy*. 82.3. 384-408.
- Lynch, M. 2008. Alethic pluralism, logical consequence and the universality of reason. *Midwest Studies in Philosophy*. 32. 1. 122-140.
- MacDonald, M. 2002 Pedagogy, pathology and ideology: the production, transmission and reproduction of medical discourse. *Discourse & Society*. 13. 4 : 447-467.
- Mathews, J. 2006. *Strategising, disequilibrium and profit*. Stanford, CA. Stanford University Press.
- Mautner, T. 2000. *The Penguin dictionary of philosophy*. London. Penguin Books.
- McDaniel, S & Kolari, J. 1987. Marketing strategy implications of the Miles and Snow strategic typology. *Journal of Marketing*. 51. 19-30.
- McDonough, J. 2003. A *Rosa Multiflora* by any other name: taxonomic incommensurability and scientific kinds. *Synthese*. 136. 337-358.
- McKelvey, B. 1975 Guidelines for the Empirical Classifications of Organisations. *Administrative Science Quarterly* 20, 4 : 509-525.
- McKelvey, B. 1979. Organisational taxonomy: lessons from biology. *Management Science*. 24. 13. 1428-1440
- McKelvey, B. 1982. *Organisational systematics: taxonomy, evolution, classification*. Berkeley, CA. University of California Press.
- McOuat, G. 2009. The origins of 'natural kinds': keeping 'essentialism' at bay in the age of reform. *Intellectual History Review*. 19. 2. 211-230.
- McQuarrie F A E 2005 How the past is present(ed); a comparison of information on the Hawthorne studies in Canadian management and organisational behaviour textbooks. *Canadian Journal of Administrative Sciences*. 22 3 : 230-242.
- Medin, D.& Atran, S. (eds). 1999. *Folkbiology*. Cambridge, MASS. The MIT Press.

- Medin, D. & Ortony, A. 1989. Psychological essentialism. In Vosniadou, S. & Ortony, A. (eds) *Similarity and analogical reasoning*. New York. Cambridge University press.
- Meyer, A. 1982 How ideologies supplant formal structures and shape responses to environments. *Journal of Management Studies* 19.1 : 45-61.
- Miles, R; Snow C; with Meyer A. & Coleman H. Jr 1978 / 2003. Re-issue with Foreword and Introduction. *Organisational Strategy, Structure and Process*. Stanford, California. Stanford Business Classic, Stanford University Press.
- Miles, R. & Snow, C. 1984. Fit, Failure and the Hall of Fame. *California Management Review*. 26,3. : 10-28.
- Miles, R; Snow, C; & Pfeffer, J. 1974 Organisation-Environment : Concepts and Issues. *Industrial Relations*. 13. : 244-264.
- Miller, D, & Friesen, P. H. 1978 Archetypes of Strategy Formulation. *Management Science*. 24, 9. : 921-933.
- Miller, D & Friesen, P. 1986 Porter's 1980 generic strategies and performance: an empirical examination with American data. Part 1. Testing Porter. *Organisation Studies*. 7.1. 37-55.
- Miller, D. 1992. The generic strategy trap. *Journal of Business Strategy*. 13. 1. 37-41.
- Miller, G. 1956. The magical number seven, plus or minus two: some limits on our capacity for processing information. *The Psychological Review*. 63. 2. 81-97.
- Miller, G. 1985. Trends and debates in cognitive psychology. In Aitkenhead & Slack (eds) 1985. *Issues in cognitive modelling*. London. Lawrence Erlbaum Associates.
- Millikan, R. 1999. Historical kinds and the "special sciences". *Philosophical Studies*. 95. 1-2. 45-65.
- Millikan, R. 2000. *On clear and confused ideas: an essay about substance concepts*. Cambridge. Cambridge University Press.
- Mintzberg H. 1979. *The structuring of organisations*. London. Prentice Hall.
- Mintzberg, H. 1987. Crafting Strategy *Harvard Business Review* 65, 4. : 66-75.
- Mintzberg, H. 1988. Generic strategies: toward a comprehensive framework. *Advances in Strategic Management*. 5. 1-67.
- Mintzberg, H. 1994. *The rise and fall of strategic planning*. Hemel Hempstead. Prentice Hall.
- Mintzberg, H. 2005. Developing theory about the development of theory. In Smith, K & Hitt, M (eds) *Great minds in management*. Oxford. Oxford University Press.

- Mintzberg, H; Ahlstrand, B; & Lampel, J. 1998. *Strategy Safari*. New York. The Free Press.
- Mintzberg, H; Lampel, J; Quinn, J; & Ghoshal, S. 2003 (2<sup>nd</sup> ed) *The strategy process: concepts, contexts, cases*. Hemel Hempstead. Prentice Hall.
- Mintzberg, H & Waters, J. 1982. Tracking strategy in an entrepreneurial firm. *Academy of Management Journal*. 25. 3. 465-499.
- Mintzberg, H. & Waters, J. 1985. Of strategies: deliberate and emergent. *Strategic Management Journal*. 6. 3. 257-272.
- Moore, M. 2005. Towards a confirmatory model of retail strategy types: an empirical test of Miles and Snow. *Journal of Business Research*. 58 : 696-704.
- Mueller, G; Mone, M; & Barker, V. 2007. Formal strategic analyses and organisational performance: decomposing the rational model. *Organisation Studies*. 28. 6. 853-883.
- Murray, A. 1988 A contingency view of Porter's "Generic strategies". *Academy of Management Review*. 13. 3. 390-400.
- Nandakumar, M; Ghobadian, A; & O'Regan, N. 2010. Business-level strategy and performance; the moderating effects of environment and structure. *Management Decision*. 48. 6. 907-939.
- Nederhof, A. 2006 Bibliometric monitoring of research performance in the social sciences and the humanities: a review. *Scientometrics*. 66. 1 : 81-100.
- Negro, G; Kocak, O; & Hsu, G. 2010. Research on categories in the sociology of organisations. In Hsu, G; Negro, G; & Kocak, O. (eds) 2010. *Categories in markets: origins and evolutions. Research in the Sociology of Organisations. Vol 31*. Bingley, UK. Emerald Group.
- Nicolai, A. 2004. The bridge to the 'real world': applied science or a 'schizophrenic tour de force' ? *Journal of Management Science*. 41. 6. 951-976.
- Nisbett, R & Wilson, T. 1977 Telling more than we know; verbal reports on mental processes. *Psychological Review*. 84. 3 231-259.
- O'Keefe, M. 2007. Of pigeonholes and rookeries: on the presentation of a business strategy classification. Paper delivered at *BAM Conference 2007*.
- O'Keefe, M. 2009. Entering and exiting the strategy canon: deification, reification and expurgation. Paper delivered to *2nd Conference – Practical criticism in the managerial social sciences*. Leicester. January 2009.
- Oliver, C. 1991. Strategic responses to institutional processes. *Academy of Management Review*. 16. 1. 145-179.

- Oliver, J. Jr. 1982 An Instrument for Classifying Organizations. *Academy of Management Journal*. 25, 4 : 855-866.
- Parnell, J.A. 2006. Generic strategies after two decades; a reconceptualisation of competitive strategies. *Management Decision*. 44. 8. 1139-1154.
- Pearson, G. 1999. *Strategy in action*. Harlow. FT Prentice Hall.
- Peters T J & Waterman R H 1982 *In search of excellence: lessons from America's best run companies..* New York. Harper & Row.
- Pettigrew, A.M. 1977 Strategy Formulation as a Political Process. *International Studies of Management and Organisation*. 7,2. : 78-87.
- Phillips, D. 1977. *Wittgenstein and scientific knowledge: a sociological perspective*. London. The Macmillan Press.
- Pidd, M. 1996. *Tools for thinking: modelling in management science*. Chichester. John Wiley & Son.
- Pinder, C C & Moore, L F 1979 The Resurrection of Taxonomy to Aid the Development of Middle Range Theories of Organisational Behavior. *Administrative Science Quarterly*. 24, 1, : 99-118.
- Porac, J; Thomas, H; & Baden-Fuller, C. 1989. Competitive groups as cognitive communities: the case of Scottish knitwear manufacturers. *Journal of Management Studies*. 26. 397-416.
- Porter, M. 1979. The structure within industries and companies' performance. *The Review of Economics and Statistics*. 61. 2. 214-227.
- Porter, M. 1980 (& 1998, new edition and Introduction). *Competitive Strategy. Techniques for Analyzing Industries and Competitors*. New York. The Free Press.
- Porter, M.E. 1981 The contribution of industrial organisation to strategic management. *Academy of Management Review* 6. 4. 609-620.
- Porter, M.E. 1983 Industrial organisation and the evolution of concepts fro strategic planning: the new learning. *Managerial and Decision Economics*. 4. 3. 172-180.
- Porter, M. 1985. *Competitive advantage; creating and sustaining superior performance*. New York. The Free Press.
- Porter M. E. & Ong, C. 1988. *Michael Porter on competitive strategy*. (Videorecording.) Boston, MA. Producer and Distributor Nathan/Tyler. Harvard Business School Publishing.
- Pugh, D S, Hickson, D J & Hinings, C R. 1969 *An Empirical Taxonomy of Work Organisations*. *Administrative Science Quarterly*. 14, 1, : 115-126.

- Putnam, H. 1975. *Mind, language and reality: (Philosophical Papers, Vol 2)*. London. Cambridge University Press.
- Ragin, C. 2008. *Redesigning social enquiry: fuzzy sets and beyond*. Chicago. University of Chicago Press.
- Reimer, M. 2009. *Reference*. Stanford Encyclopedia of Philosophy ( May 2009). <http://plato.stanford.edu/entries/reference/>
- Reynolds, P D. 1971 *A primer in theory construction*. USA. Bobbs-Merrill Inc.
- Ricketts, M. 2002 (3<sup>rd</sup> ed). *The economics of business enterprise: an introduction to economic organisation and the theory of the firm*. Cheltenham. Edward Elgar.
- Rittel, H.W. J. & Webber, M.M. 1973 Dilemmas in a General Theory of Planning. *Policy Sciences*. 4. : 155-169.
- Rothbart, D. (ed). 2004 *Modelling: gateway to the unknown ~ a work by Rom Harré*. Amsterdam. Elsevier.
- Rummelhart, D. & Norman, D. 1985. Representation of knowledge. In Aitkenhead & Slack (eds) 1985. *Issues in cognitive modelling*. London. Lawrence Erlbaum Associates.
- Rynes S L: Bartunek J M & Daft R L 2001 Across the great divide: knowledge creation and transfer between practitioners and academics. *Academy of Management Journal* 44. 2. 340-355.
- Saunders, M; Lewis, P; Thornhill, A. 1997. *Research methods for business students*. London. Financial Times, Pitman Publishing.
- Sawyer, M. 1979. *Theories of the firm*. London. LSE in association with Weidenfeld & Nicolson.
- Sayer, A. 1997. Essentialism, social construction and beyond. *The Sociological Review*. 453-487
- Sayer, A. 2000. *Realism and social science*. London. SAGE Publications.
- Scarborough, H. & Swan, J. 2001. Exploring the diffusion of management: the role of fashion. *British Journal of Management*. 12. 1. 3-12.
- Scruton, R. 1994/2004. *Modern philosophy: an introduction and survey*. London. Pimlico Books.
- Searle, J. 1995. *The Construction of Social Reality*. USA. Simon & Schuster. ( UK 1996. London, Penguin Books ).
- Searle, J. 1999. *Mind, language and society: philosophy in the real world*. London. Pheonix, Orion Books.



- Segev, E. 1987 Strategy, strategy making and performance – an empirical investigation. *Management Science*. 33, 2. : 258-269.
- Seidl, D. 2007. General strategy concepts and the ecology of strategy discourses: a systematic-discursive perspective. *Organization Studies*. 28 (02); 197-218.
- Sheehan, N & Foss, N. 2007. Enhancing the prescriptiveness of the resource-based view through Porterian activity analysis. *Management Decision*. 45.3. 450-461.
- Short, J; Ketchen, D; Palmer, T; Hult, T. 2007. Firm, strategic group and industry influences on performance. *Strategic Management Journal*. 28. 147-167.
- Shortell, S & Zajac, E. 1990 Perceptual and Archival Measures of Miles and Snow's Strategic Types: A comprehensive assessment of Reliability and Validity. *Academy of Management Journal*. 30, 4 : 817-832.
- Shotter, J. 2005. "Inside the moment of managing": Wittgenstein and the everyday dynamics of our expressive-responsive activities. *Organisation Studies*. 26. 1. 113-135.
- Sills, D L ( Ed )1968. *International Encyclopaedia of the Social Sciences*. New York. Macmillan Company and The Free Press.
- Singh, K; Ang, S.H; Leong, S.M. 2003. Increasing Replication for Knowledge Accumulation in Strategy Research. *Journal of Management*. 29, 4. : 533-549.
- Simon, H A. 1979 Rational decision making in business organisations. *The American Economic Review*. 69. 4. 493-513.
- Smith, E. & Medin, D. 1981. *Categories and concepts*. Cambridge, MA. Harvard University Press.
- Smith, K. 2002. Typologies, taxonomies and the benefits of policy classification. *Policy Studies Journal*. 30, 3. 379-396.
- Smithson, M & Verkuilen, J. 2006. *Fuzzy set theory: applications in the social sciences*. Thousand Oaks. CA. SAGE Publications.
- Sneath, P, & Sokal, R. 1973 *Numerical Taxonomy : The principles and practice of numerical classification*. San Francisco. W H Freeman & Company
- Snow, C.C. 1976. The Role of Management Perceptions in Organisational Adaptation: An exploratory study. *Academy of Management Proceedings*. August 1976. : 249-255.
- Snow C C & Hambrick D C 1980 Measuring Organisational Strategies : Some Theoretical and Methodological Problems. *Academy of Management Review*. 5, 4, : 527-538.
- Snow, C C & Hrebiniak, L G. 1980 Strategy, Distinctive Competence and Organisational Performance. *Administrative Science Quarterly*. 25, 2. : 317-336.

Spender, J. 1989. *Industry recipes: an enquiry into the nature and sources of managerial judgement*. Oxford. Basil Blackwell.

Stacey, R.D. 2000 (3<sup>rd</sup> ed), 2003 (4<sup>th</sup> ed). *Strategic management and organisational dynamics*. Harlow, Essex. Pearson Education Ltd.

Starkey K & Madan P 2001 Bridging the relevance gap: aligning stakeholders in the future of management research. *British Journal of Management* 12. Special Issue: s3-26.

Steel, D. 2008. *Across the boundaries: extrapolation in biology and social science*. New York. Oxford University Press.

Taleb, N. 2007. *The black swan: the impact of the highly improbable*. London. Allen Lane.

Taylor, J. 2003. (3<sup>rd</sup> ed). *Linguistic categorisation*. Oxford. Oxford University Press.

Thomas, H & Pollock, T. 1999. From I-O economics's S-C-P paradigm through strategic groups to competence-based competition: reflections on the puzzle of competitive strategy. *British Journal of Management*. 10. 127-140.

Thomasson, A. 2003. Realism and human kinds. *Philosophy and Phenomenological Research*. 67. 3. 580-609.

Thomasson, A. 2009. Categories. Stanford Encyclopedia of Philosophy. (January 2009). <http://plato.stanford.edu/entries/categories/>

Thompson A & Strickland A 1984 (3<sup>rd</sup> ed) 1978 (4<sup>th</sup>) 1993 (7<sup>th</sup>) 1998 (10<sup>th</sup>) 2001 (12<sup>th</sup>). *Strategic Management: concepts and cases*. (3<sup>rd</sup>, 4<sup>th</sup>, 7<sup>th</sup>) Plano, Texas. Business Publications Inc. (10th) Boston, Massachusetts. Irwin McGraw-Hill. (12<sup>th</sup>) New York, McGraw Hill.

Thornton, P & Ocasio, W. 2008 Institutional logics. In Greenwood, R; Oliver, C; Suddaby, R; & Sahlin-Andersson, K. (eds) *Sage Handbook of Organisational Institutionalism*. London. Sage Publications.

Thouless, R. 1953. *Straight and crooked thinking*. London. Pan Books.

Tiryakian, E A 1968. 'Typologies' in D Sills ( ed ) *International Encyclopedia of the Social Sciences*. Vol 16, p 177-186. New York. Macmillan and The Free Press.

Toulmin, S. E 1958 *The Uses of Argument*. Cambridge. Cambridge University Press.

Tsoukas, H. 1998. The word and the world: a critique of representationalism in management research. *International Journal of Public Administration*. 21. 5. 781-817.

Tsoukas, H. 2000. What is management ? An outline of metatheory. In Ackroyd & Fleetwood (eds) 2000. *Realist perspectives on management and organisations*. London. Routledge.

Ungerer, F. & Schmid, H-J. 2006 (2<sup>nd</sup> ed). *An introduction to cognitive linguistics*. Harlow. Pearson Education.

Uzgalis, W. 2007. *John Locke*. Stanford Encyclopedia of Philosophy (May 2007). <http://plato.stanford.edu/entries/locke/>

Van Leeuwen, T 2006 The application of bibliometric analyses in the evaluation of social science research. Who benefits from it, and why it is still feasible. *Scientometrics*. 66. 1 : 133-154.

Venkatraman N & Grant J H 1986 Construct Measurement in Organisational Strategy Research : A Critique and Proposal. *Academy of Management Review*. 11, 1. : 71-87.

Von Senger, H. 2006 (English translation) *The 36 stratagems for business*. Singapore. Marshall Cavendish Business.

Weick, K.E. 1979. *The Social Psychology of Organising*. Reading, Mass: Addison-Wesley.

Weick, K.E. 1995 *Sensemaking in Organisations*. Thousand Oaks, California. Sage Publications Inc.

Wenger, E. 1998. *Communities of practice: learning, meaning and identity*. Cambridge. Cambridge University Press.

Wheelen T & Hunger J 1983 (1<sup>st</sup> ed) 1987 (2<sup>nd</sup>) 1990 (3<sup>rd</sup>) 1995(5<sup>th</sup>) 1998(6<sup>th</sup>) 2002 ( 8<sup>th</sup>) 2008 (11<sup>th</sup>). *Strategic management and business policy*. (1-5<sup>th</sup>) Reading Massachusetts. (Addison-Wesley Publishing. (6<sup>th</sup>) Reading, Massachusetts. Addison-Wesley Longman. (8<sup>th</sup>) New Jersey. Prentice Hall, Pearson Education. (11<sup>th</sup>) New Jersey. Pearson Prentice Hall.

Whittington, R. 1993. *What is strategy ~ and does it matter ?* London. Routledge.

Wilson, R. 1999. *Species: new interdisciplinary essays*. Cambridge. MASS. The MIT Press.

Woodside, A.G., Sullivan, D.P. & Trappey III, R.J. 1999. Assessing relationships among strategic types, distinctive marketing competencies and organisational performance. *Journal of Business Research*. 45. : 135-146.

Zadeh, L. 1965. Fuzzy sets. *Information and Control*. 8. 3. 338-353.

Zahra, S & Pearce, JA II. 1990 Research Evidence on the Miles-Snow Typology. *Journal of Management*. 16, 4. : 751-768.

Zajac, E.J. & Shortell, S.M. 1989. Changing Generic Strategies: Likelihood, Direction and Performance Implications. *Strategic Management Journal*. 10, 5. : 413-430.